CHAPTER 2 ALTERNATIVES

2.1 INTRODUCTION

The Resource Management Plan (RMP) alternatives evaluated in this Final Environmental Impact Statement (FEIS) were developed by the Bureau of Reclamation study team using the input received from the Land Management Agency and Ad Hoc work groups, state and federal agency representatives, and the public. Based upon the issues identified through the public involvement and scoping process (see Chapter 1), the work groups helped the Reclamation develop a set of RMP goals and objectives (see Appendix A) for Potholes Reservoir. These goals and objectives provided the underlying framework used by the study team to develop the range of alternatives detailed in this chapter. The Preferred Alternative was selected by Reclamation based on the analysis in the Environmental Assessment and recommendation from the LMA Group and Ad-Hoc Group. On January 26, 2001, the Potholes Draft Environmental Impact Statement (Potholes DEIS) was released for public review. Due to the public's heavy response pertaining to proposed closure of existing portions of the Off Road Vehicle (ORV) Area, the comment period was extended to April 28, 2001. During this time a public hearing and several Ad Hoc and concerned group meetings were held. In April, two public protests and one support rally regarding the closure of the Yellow Zone occurred at the Bureau of Reclamation (Reclamation) office in Ephrata, Washington.

Reclamation conducted a Potholes DEIS public hearing on March 13, 2001, at the Midway Learning Center in Moses Lake, Washington, to hear and record the public's comments. The hearing consisted of two sessions (from 3:00 p.m. to 5:00 p.m. and from 7:00 p.m. to 9:00 p.m.). Approximately 150 people attended the sessions. Of those, 29 individuals made statements for the public record. Most comments reflected concern about the proposed limitations of ORV use in the Yellow Zone.

Reclamation conducted an agency meeting, on May 7, 2001, attended by representatives of the U.S. Fish and Wildlife Service (FWS), the Washington Department of Fish and Wildlife (WDFW), and the Grant County Sheriffs Office. The purpose of the meeting was for the administering agencies to consider modifying proposed acreage reduction of the ORV Yellow Zone, based on the comments received at the public hearing. Individuals from Grant County discussed personnel limitations and budget constraints of the agencies to adequately manage present jurisdictions. WDFW and Reclamation expressed the need to balance habitat preservation with public demand for recreation use within the study area. After the suggestion of various management options, Reclamation informed the group they would present the findings to Reclamation's regional manager.

The participating agencies met again, on June 4, 2001, to discuss a modified Preferred Alternative for the ORV Yellow Zone. Agreement from the user groups, agencies, and jurisdictional entities modified the Preferred Alternative to say, "Close 919 acres of the 1,459 acre Lower Crab Creek Arm Management Area (Yellow Zone) to motor vehicle travel and ORV use year-round. Maintain as seasonally open (July 1 to October 1) 540 acres of the 1,459 acre Yellow Zone."

Each alternative identifies specific actions to be taken within each management area as well as actions that are applicable reservoir-wide. The range of alternatives considered and described in this chapter includes the four alternatives initially developed by the study team and modified to incorporate additional public and agency comments, issues, and resource constraints. To help the reader understand and compare each of the alternatives evaluated in this FEIS, Tables 2-1 through 2-3 summarize the alternatives in matrix form in Section 2.4.

During RMP/FEIS scoping, the public clearly identified natural resource protection as essential in any management plan for the RMP study area. The public comments also indicated that those who use Potholes Reservoir place a high value on keeping the area semi-primitive with overnight use focused in developed recreation areas or designated dispersed use areas. Off-road vehicle use and dispersed camping were common concerns due to the adverse impacts often associated with these activities (e.g., soil erosion, habitat damage, and wildlife disturbance). Consequently, the management themes used to develop the alternatives described in this chapter address these general principles and resource concerns.

To assist in the development of environmentally sensitive alternatives, the Reclamation team conducted a land suitability and constraints analysis. The analysis involved a two-step process: (1) the development of land suitability criteria, and (2) the application of these criteria to the study area. Through this process, areas appropriate for resource protection, Habitat Management Area (HMA) designation, or general public use were identified.

It is important for the reader to note that the land and water surface acreage included in this FEIS are based on estimates derived from aerial photographs taken on April 28, 1994. These photographs represent high reservoir water elevations and consequently do not reflect the land additions that occur as reservoir elevations decline. At low reservoir elevations, the total land surface area located within the study area is significantly higher.

This chapter describes three RMP "action" alternatives as well as the alternative of "no action." This Chapter will also discuss those alternatives considered and the rational for elimination from further study. The alternatives and themes which emerged from the planning process can be characterized as follows:

Alternative A - No Action: This alternative includes the actions and developments likely to occur in the absence of adopting and implementing a RMP for Potholes Reservoir. Many of the actions and developments identified are either required under existing Reclamation or federal law, policy, or regulation; are needed to meet applicable state or local regulations; or are authorized by existing management plans and agency policies in effect at Potholes Reservoir. This alternative therefore represents the current and foreseeable management situation at Potholes Reservoir.

Similar to the three "action" alternatives described below (Alternatives B, C, and D), the Washington State Parks and Recreation Commission (SPRC) and Washington Department of Fish and Wildlife (WDFW) will continue to administer and manage the Potholes Reservoir area with oversight provided by the Ephrata Field Office of the Bureau of Reclamation. The Grant County Sheriff's Office will also remain a management partner at the reservoir providing general law enforcement services and periodic patrols within the Grant County ORV Area.

No changes would be made to motorized travel and ORV management within the RMP study area. The 433-acre "Red Zone" would remain closed to motorized travel/ORV use year-round, the 1,459- acre "Yellow Zone" would remain open to motorized travel/ORV use from July 1 to October 1, and the 1,895-acre "Green Zone" would remain open to motor vehicle travel/ORV use year-round. The Grant County ORV Area currently includes Reclamation lands both inside and outside the RMP study area as well as Grant County lands adjacent to the study area resulting in about 1,895 acres "open year-round" and 1,459 acres "open seasonally."

Existing roads, trails, and recreation facilities would be maintained to support current levels of activity, with limited improvements made only on an as-needed basis and as funding permits. Required improvements for safety, sanitation, and accessibility for persons with disabilities would also be undertaken as funding allows. Overall, future land use and resource management decisions would continue on an ad hoc basis in the absence of a cohesive and comprehensive RMP to guide agency decisions and activities over the 10 year planning period.

Alternative B - Preferred: Alternative B is the Reclamation's preferred alternative. It balances the management agencies' and public's long-term vision for Potholes Reservoir, recognizing the need to protect the natural and cultural environment while supporting the overall recreational interests of visitors. By combining elements and features from Alternatives C and D and the modifications from agency and public review, Alternative B best satisfies the RMP goals and objectives.

A mix of developed recreation areas and "designated" dispersed camping areas would be provided to accommodate the demand for recreation facilities and sites, and to direct use to specific areas environmentally suited for public use. ORV use restrictions are proposed to improve wildlife habitat, wildlife populations, sand dune integrity, and vegetative cover. This would be accomplished by permanently closing 919 acres of the 1,459 acre "Yellow Zone" within the RMP boundary to motor vehicle travel and ORV use and maintain as seasonally open (July 1 to October 1) the remaining 539 acres. The Grant County ORV Area would be limited to the existing "Green Zone" and encompass an estimated total of 2,435 acres inside and outside of the RMP area which is "open year-round" to ORV riding.

Alternative C - Preservation and Enhancement: This alternative emphasizes natural resource preservation and enhancement. The number of developed recreation areas and facilities would remain essentially unchanged as no new developments would be constructed except to meet minimum basic facility needs for sanitation, public safety, and accessibility for persons with disabilities. With more of the primitive road network closed to motorized travel, fewer dispersed recreation areas would remain accessible by motor vehicle compared to the other alternatives. Similar to the other "action" alternatives, land use activities would be focused and managed within environmentally suitable areas to reduce resource impacts and disturbances.

ORV use within the RMP study area would be discontinued by permanently closing the "Yellow Zone" (located in the Lower Crab Creek Arm Management Area) and a portion of the "Green Zone" (located in the Eastern Dunes Management Area) inside the RMP area, to motor vehicle travel and ORV use. The Grant County ORV Area would encompass about 1,227 acres and would consist of the "Green Zone" located outside the RMP study area boundary.

Alternative D - Recreation Development: With an emphasis on recreation development, this alternative includes the highest number of developed and primitive recreation facilities and sites. Consistent with this management emphasis, ORV opportunities would be expanded by allowing ORV riding along several designated trails leading to the western shore of Moses Lake. The Grant County ORV Area would encompass about 1,895 acres inside and outside the RMP area, "open year-round" and, 1,459 acres "open seasonally" within the RMP and the existing "Yellow Zone" to ORV riding. The size of the ORV park would be the same as the "No Action", greater access opportunities would be a specific element of Alternative D. Similar to the other "action" alternatives, other land use activities would generally be focused and managed within environmentally suitable areas to reduce resource impacts and disturbances.

2.2 ALTERNATIVES CONSIDERED BUT ELIMINATED FROM FURTHER STUDY

Many site-specific options and management recommendations were identified and discussed with the land management agencies (SPRC and WDFW) throughout the RMP planning effort. Nearly all of them were incorporated into the alternatives and carried forward for analysis. No other complete alternative was considered.

As the alternatives were developed and refined, a number of individual plan elements and features were dropped from further consideration. One such element would have maximized the animal-unit-month (AUM) grazing allocation in North Potholes Reserve. This action was eliminated due to problems with the present grazing regime as well as higher livestock utilization and AUM allocations in a legislatively established State Game Reserve. The reserve is used by a large variety of game and nongame wildlife year-round and is managed for waterfowl production.

Another element eliminated from detailed study involved the establishment of idle speed and no wake zones on the main reservoir for the purpose of improving boating and public safety. This element was eliminated due to recent amendments to Grant County Ordinance 6.08 - "An Ordinance Providing for the Safety of Boaters, Swimmers, and Others Using the Waters of Grant County and Providing Certain Regulations and Restrictions on the Use of Such Waters." Adopted in June 1999, the current ordinance provides that it is unlawful to operate a vessel:

- within water areas clearly marked by buoys or some other distinguishing device as a bathing or swimming area;
- at a speed in excess of minimum wake speed in any area marked with buoys or logs as a speed restricted area;
- on plane within 100 feet of other vessels, designated or marked swimming areas, any object fixed or floating, including without limitation, docks, swimming platforms; and
- on plane within 300 feet of a boat launching ramp.

It should be noted that some additional low speed and minimum wake restrictions are being considered and evaluated in this FEIS. These restrictions are designed to "seasonally" restrict watercraft speeds in selected reservoir areas (e.g., Habitat Management Areas) for the primary purpose of enhancing wildlife reproductive success.

Other plan features eliminated include:

- Install floating restrooms in the Dunes/Sand Islands management area. Several members of the public suggested that floating restrooms be considered. The Reclamation and the land management agencies eliminated this action because none of the agencies felt they had adequate resources to build and properly manage and maintain a floating restroom system on Potholes Reservoir. The need for such a system was also unsubstantiated.
- Require self-containment of sanitary waste for all boaters. Although initially considered as an alternative management strategy for the control of human wastes in the Dunes/Sand Islands management area, the land management agencies dismissed this proposal. An inability to enforce this type of action was the main reason for the dismissal.
- Develop a scenic overlook of Potholes Reservoir in the elevated area south of the reservoir. This action was eliminated because it is outside the RMP study area.

2.3 COMPARATIVE SUMMARY OF THE ALTERNATIVES

Each of the alternatives includes a set of management actions consistent with the management theme developed for that alternative. Many of the specific management actions included in the alternatives were identified by interested agencies or the public during scoping and the RMP/EIS public involvement effort. Others were developed by the study team in response to an identified issue, concern, or resource need. For each of the RMP alternatives (B, C and D), the management actions also follow the general strategies outlined in Appendix B, "General Management Strategies Associated with the RMP Alternatives."

Table 2-1 summarizes by topic the management actions included in each of the four alternatives. A dot indicates that the management action is included in the alternative and an asterisk indicates that the action varies by alternative. The following topics were used to organize and discuss the specific management actions and plan features included in each of the alternatives considered and evaluated.

- Natural Resources
- Cultural Resources
- Recreation
- Land Use and Administration

- Off-Road Vehicle Management
- Grazing Management
- Visitor Information/Interpretation
- Public Health and Safety/Environmental Protection

The alternative and concept maps (Figures 2-1 through 2-7) included in Section 2.5, "Detailed Description of the Alternatives," visually display the specific management actions and features included in each alternative. Table 2-2 and Figure 2-1 display the key management actions by management area and Table 2-3 compares by resource type the environmental consequences of each alternative as described in Chapter 4, "Environmental Consequences". These tables are included in this section.

2.4 MANAGEMENT ACTIONS COMMON TO ALL ALTERNATIVES

Some management actions are included in all the alternatives because of existing law, regulatory requirements, or Reclamation policy. Others address a specific resource need or are authorized under existing management agreements or plans expected to continue regardless of the alternative selected. The following list summarizes by topic the management actions which are included in, and common to, all four of the alternatives described in this chapter and evaluated in Chapter 4.

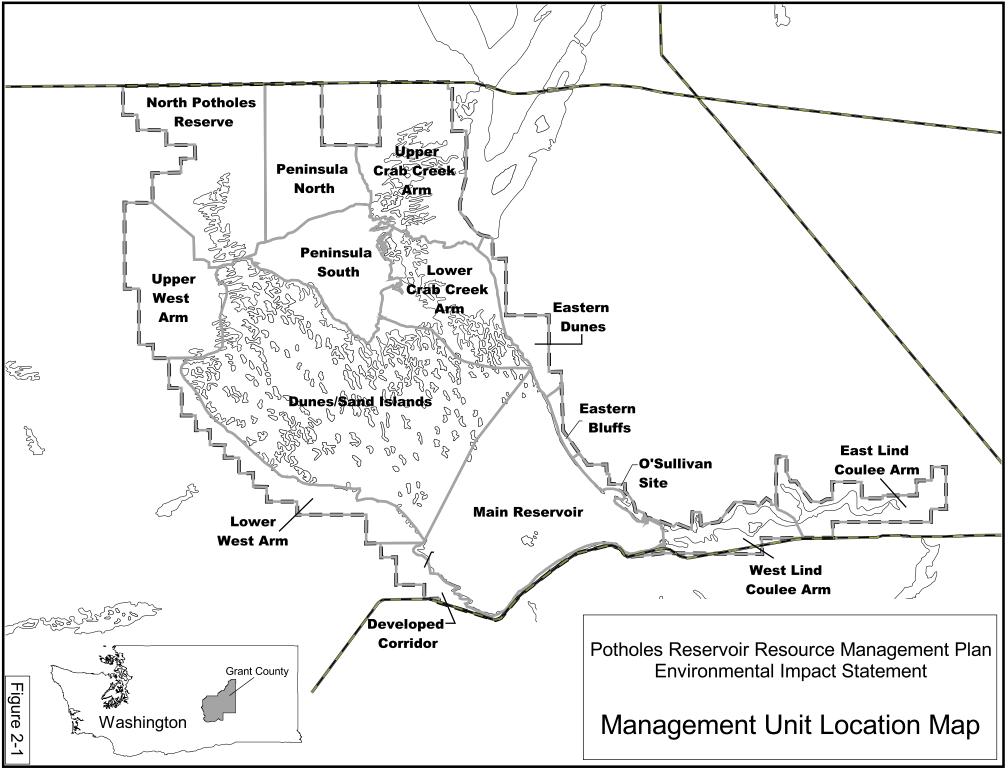
Natural Resources:

- Conduct site-specific surveys focusing on endangered, threatened, and sensitive plants, wildlife, and their habitats prior to initiating development actions.
- Work cooperatively with the Noxious Weed Control Board of Grant County in identifying and prioritizing areas where noxious weed control is necessary.
- Emphasize weed control efforts in areas with high wildlife habitat value and potential for native species reestablishment.
- Use signs and other educational methods to enlist increased public participation in the control of noxious weeds.
- Assess the extent to which Eurasian water milfoil has become established in the reservoir and the need for and desirability of future control practices.

Managament Actions	A	lteri	nati	ves
Management Actions	A	В	С	D
NATURAL RESOURCES				
Soil Conservation and Erosion Control				
Conduct an integrated erosion inventory and control program; identify corrective measures, prioritize rehabilitation areas; and assess program results		•	•	•
Implement shoreline erosion control with an emphasis on protecting cultural resources and public facilities in developed recreation areas		•	•	•
Limit or eliminate surface disturbing activities on soils with a high soil erosion potential		•	•	•
Post signs/install barriers to close primitive roads where erosion is a problem		•	•	•
Provide water access within the Developed Corridor via constructed trails and boardwalks		•	•	•
Vegetation and Weed Control				
Restore/rehabilitate closed roads and other disturbed areas		*	*	*
Support private and volunteer efforts to plant native species in areas identified for enhancement or rehabilitation		•	•	•
Minimize acreage of irrigated grass in Potholes State Park to maintain quality shrub-steppe habitat		•	•	•
Monitor and evaluate the success of vegetation rehabilitation and natural revegetation projects for aquatic and terrestrial activities		•	•	•
Allow limited use of spot herbicide applications to kill small patches of watermilfoil affecting boat ramps, courtesy docks, and public swimming areas		•		•
Mechanically remove (by cutting) salt cedar trees (<i>Tamarix</i>) within the Dunes/Sand Islands, Upper and Lower Crab Creek Arms, North Potholes Reserve, and Upper West Arm management areas		•	•	•

^{*} Management action will vary by alternative

[•] Management action included in alternative



Managament Actions	A	Alternati B C	nati	ves
Management Actions	Alt	В	С	D
Vegetation and Weed Control (continued)				
Allow herbicide applications to kill patches of purple loosestrife				•
Revegetate severely damaged areas in Lower Crab Creek Arm management area		•	•	•
Fish and Wildlife				
Designate the Upper West Arm and Upper Crab Creek Arm as "Habitat Management Areas" (HMAs) - Seasonally restrict watercraft to low speed/minimum wake operation from March 15 through June 30 - Seasonally prohibit dispersed camping from March 15 through June 30 to enhance wildlife nesting/breeding success		•		
Designate the Upper West Arm, Upper Crab Creek Arm, Peninsula South, and East Lind Coulee Am as HMAs - Prohibit motorized watercraft in the Upper West Arm and East Lind Coulee Arm - Restrict watercraft to low speed/minimum wake operation in the Upper Crab Creek Arm year-round - Limit dispersed camping opportunities to specific sites designated and posted as "open" (see Figures 2.6.1, 2-6.2 and 2.6.3) - Continue existing road/motor vehicle closures within the Upper West Arm and limit motor vehicle travel in the Upper Crab Creek Arm, Peninsula South, and East Lind Coulee Arm to existing graveled roads			•	
Designate the Upper West Am as an HMA - Seasonally restrict watercraft to low speed/minimum wake operation from March 15 through June 30 - Seasonally prohibit dispersed camping from March 15 through June 30 to enhance wildlife nesting/breeding success				•
Seasonally restrict watercraft to low-speed/minimum wake operation in the Dunes/Sand Islands management area from April 15 through June 30			•	1
Maintain and enhance the diking system in North Potholes Reserve, Upper Crab Creek, and Upper West Arm management areas		•	•	•

^{*} Management action will vary by alternative

[•] Management action included in alternative

Managament Actions	A	lter	nati	ves
Management Actions	A	В	С	D
Fish and Wildlife (continued)				
Manage diked, "carp-free" waters for aquatic wildlife or a separate fishery from the main reservoir		•	•	•
Allow the limited use of rotenone in "carp-free" management waters		•	•	•
Identify and protect bald eagle perching and foraging winter habitat		•	•	•
Post signs to seasonally close specific areas, campsites or islands during critical wildlife breeding/nesting periods		•	•	•
Enhance bald eagle wintering/roosting habitat by planting additional trees (i.e., cottonwoods and willows)		•	•	•
Seasonally restrict public access of any type in the south/central portion of North Potholes Reserve from March 15 through May 30		•	•	
Eliminate roads and minimize trails through wetlands, meadows, riparian, and other sensitive wildlife habitats		•	•	•
Prohibit use of pesticides and herbicides harmful to fish and/or wildlife in HMAs		•	•	•
Water Quality				
Plan and prioritize future Clean Water Act (CWA) actions for Columbia Basin Project (CBP) waters and collaborate these actions through the Oversight Panel consisting of Reclamation, W DOE, EPA, and the CBP Irrigation District representatives:				
 Develop appropriate water quality standards for Potholes Reservoir including uses and criteria Identify current and future water quality monitoring needs and determine which of these are appropriate for federal, state, or local accomplishment Develop water quality management plans for those waters identified in Section IV D of the CWA 	•	•	•	•
Continue historic and ongoing water quality monitoring programs; modify or expand these programs as necessary to make the determinations called for in Section IV A and IV B of the CWA	•	•		•

^{*} Management action will vary by alternative

[•] Management action included in alternative

Management Actions	A	Alterna	nati	ves
Management Actions	A	В	C	D
Water Quality (continued)				
Review through the Oversight Panel the need for an expanded reservoir water quality and sediment sampling program to determine concentrations of potential contaminants of concern and the effects of mosquito control spraying activities and chemicals on reservoir water quality and biota		•	•	•
Review through the Oversight Panel the need for routine testing of fish flesh for concentrations of organic pesticides, metabolic by-products and heavy metals		•	•	•
Work with Grant County Mosquito Control District #1 to avoid or minimize mosquito spraying activities in the Upper West Arm, Upper Crab Creek Arm, and North Potholes Reserve management areas		•		
Work with Grant County Mosquito Control District #1 to avoid or minimize mosquito spraying activities in the Upper West Arm, Upper Crab Creek Arm, Peninsula South, East Lind Coulee Arm, and North Potholes Reserve management areas			•	<u> </u>
Work with Grant County Mosquito Control District #1 to avoid or minimize mosquito spraying activities in the Upper West Arm management area				•
Visual Quality				l
Develop criteria for the appearance of structures and natural landscape preservation		•	•	•
Increase the promotion of "pack-in/pack-out" waste management practices	•	•	•	•
Remove illegal trash dumps located in the study area		•	•	•
Cultural Resources				
Work with Native Americans with interests at Potholes Reservoir to develop and display appropriate interpretive information on Native American use of the area		•	•	•

^{*} Management action will vary by alternative

[•] Management action included in alternative

Management Actions	A	lteri	ternati B C	ternativ	
Management Actions	A	В	С	D	
Cultural Resources (continued)					
If cultural resources are found on Reclamation lands "open" to ORV use that are eligible for the National Register, the Grant County ORV Area boundary would be adjusted to protect identified cultural resources and/or sites		•		•	
Conduct Class III surveys and prepare a Cultural Resource Management Plan (CRMP). The CRMP will outline specific actions and methods to protect cultural resources.		•	•	•	
Coordinate with Native Americans with interests at Potholes Reservoir to prepare the CRMP and manage cultural resources.		•	•	•	
Recreation					
Continue to allow dispersed, unregulated camping in all areas except North Potholes Reserve, Potholes State Park and Mar Don Resort provided that natural or cultural resources are not jeopardized	•				
Designate Peninsula North, Peninsula South, Lower Crab Creek Arm, Lower West Arm, and Dunes/Sand Islands (the WDFW may seasonally close specific islands) as "open" for dispersed camping		•			
Designate Upper Crab Creek Arm and Upper West Arm as "seasonally open" for dispersed camping. During seasonal closure period (March 15 - June 30), dispersed camping available at specific sites designated and signed as "open"		•			
Designate North Potholes Reserve, O'Sullivan Site, East Lind Coulee Arm, West Lind Coulee Arm, Developed Corridor, Eastern Dunes and Eastern Blufß as "closed" to dispersed camping. Limit dispersed camping opportunities within these management areas to specific sites designated and signed as "open"		•			
Designate Peninsula North, Lower Crab Creek Arm, O'Sullivan Site, Lower West Arm, and Dunes/Sand Islands (the WDFW may seasonally close specific islands) as "open" for dispersed camping			•		

^{*} Management action will vary by alternative

[•] Management action included in alternative

Table 2-1
Summary of Alternatives and Management Actions
Potholes Reservoir RMP Final Environmental Impact Statement

Managamant Agtions	A	lter	nati	ves
Management Actions	A	В	С	D
Recreation (continued)				
Designate North Potholes Reserve, Upper Crab Creek Arm, Peninsula South, West Lind Coulee Arm, and Developed Corridor as "closed" to dispersed camping. Limit dispersed camping opportunities within these areas to specific sites designated and signed as "open"			•	
Designate Upper West Arm, Eastern Dunes, Eastern Bluffs, and East Lind Coulee Arm as "closed" to dispersed camping			•	
Designate Peninsula North, Peninsula South, Upper Crab Creek Arm (note: camping along the west shore of Moses Lake east of Sand Dunes Road would be limited to designated primitive camping areas along the lake shoreline), Lower Crab Creek Arm, Lower West Arm, Dunes/Sand Islands (the WDFW, may seasonally close specific islands), Eastern Dunes, Eastern Bluffs, and East Lind Coulee Arm as "open" for dispersed camping				•
Designate the Upper West Arm HMA as "seasonally open" for dispersed camping. The seasonal closure would extend from March 15 - June 30				•
Designate North Potholes Reserve and West Lind Coulee Arm as "closed" to dispersed camping. Limit dispersed camping opportunities within these areas to specific sites designated and signed as "open"				•
Designate the Developed Corridor and O'Sullivan Site as "closed" to dispersed camping				•
Designate and manage primitive camping areas (see Fig. 2-7.1 and 2.7.2 for specific site locations)				•
Annually monitor the impacts associated with dispersed camping and recreational use	•	•	•	•
Unless otherwise posted, adopt and enforce a reservoir-wide 15-day camping stay limit outside developed recreation areas		•		•
Unless otherwise posted, adopt and enforce a reservoir-wide 10-day stay limit outside developed recreation areas			•	
Provide centrally located toilets (permanent or seasonal) to meet human waste disposal needs in high use areas		*	*	*
Provide for the future expansion of recreation facilities and services within Potholes State Park (see Figure 2-3)	•	•	•	•
Provide a developed recreation area at O'Sullivan Site - North as a unit of Potholes State Park (see Figures 2-4.1 and 2-5)		•		•

^{*} Management action will vary by alternative

[•] Management action included in alternative

Table 2-1 Summary of Alternatives and Management Actions Potholes Reservoir RMP Final Environmental Impact Statement

Management Actions	A	lter	ternativ				
Management Actions	A	* · · ·	С	D			
Recreation (continued)							
No developed recreation area would be constructed at the O'Sullivan Site. Instead, the area would be transferred to the WDFW and managed for dispersed camping and day use. Two permanent vault toilets would be centrally located in the O'Sullivan Beach area			•				
Develop additional interpretive trails and overview sites to expand "Watchable Wildlife" opportunities	*	*	*	*			
Provide courtesy docks at the Glen Williams boat launch		•	•	•			
Provide courtesy docks at the Blythe boat launch				•			
Surface the informal (cartop) boat launch at Blythe		•		•			
Assess the feasibility of modifying/reconstructing the main boat launch at Blythe		•		•			
Season ally restrict public access of any type in the south/central portion of North Potholes Reserve from March 15 - May 30		•	•				
Allow non-motorized access and floating device use year-round within North Potholes Reserve				•			
Open two miles of primitive road to motorized travel to improve public recreation access in the East Lind Coulee Arm (see Figure 2-7.2)				•			
Work with WDOT to site and develop an asphalt-surfaced bicycle/pedestrian trail between Potholes State Park and O'Sullivan Dam	•	•	•	•			

^{*} Management action will vary by alternative

[•] Management action included in alternative

Managament Actions	A	* * *	nati	ves
Management Actions	A		С	D
Recreation (continued)				
Provide signs directing visitors to all developed recreation areas and "designated" dispersed camping areas/sites at key road intersections	*	*	*	*
Install "No Parking/No Camping" signs in immediate vicinity of the Powerline Boat Launch to improve vehicle/trailer maneuverability and traffic flow		•	•	•
Install a permanent vault toilet at the Powerline Boat Launch		•	•	•
Improve the Powerline boat launch and parking area				•
Provide for the periodic dredging/removal of sediments deposited at the base of public boat launches		•		•
Provide for the periodic dredging/removal of sediments deposited at the base of public boat launches within the Developed Corridor			•	
Land Use and Administration				
Modify the land use agreement between the W DFW and Grant County to operate and maintain an ORV Area to include only those Reclamation lands located in the existing "Green" and "Yellow" zones; exclude those lands (approximately 105 acres) in the Eastern Bluffs management area that are included in the existing ORV Area lease, but situated outside the "Green Zone" boundary	•			•
Modify the land use agreement between the WDFW and Grant County to operate and maintain an ORV Area to include only those Reclamation lands within the Eastern Dunes management area and south half of Section 10, T18N, R28E		•		
Modify the existing land use agreement between the WDFW and Grant County to operate and maintain an ORV Area to include only those Reclamation lands in the south half of Section 10, T18N, R28E (320 acres)			•	

^{*} Management action will vary by alternative

[•] Management action included in alternative

Managament Actions	A	Alternat	nati	ves
Management Actions	A	В	С	D
Land Use and Administration (continued)				<u> </u>
Transfer "lead agency" recreation management responsibilities within the Developed Corridor to the SPRC				•
Transfer "lead agency" recreation management responsibilities at the O'Sullivan Site to the WDFW			•	
Off-Road Vehicle (ORV) Management				
Continue to limit ORV use to existing "Yellow" and "Green" zone boundaries and restrictions; continue "Red Zone" year-round ORV closure (see Figures 2-2 and 2-2.1)	•			
Modify the Grant County ORV Area boundary to include the Eastern Dunes management area, 320 acres of Reclamation land outside the RMP study area in the south half of Section 10, T18N, R28E and Grant County ORV Area lands. Except for maintenance and administrative use, 919 acres of the Lower Crab Creek Arm management area would be closed to motor vehicle travel/ORV use (see Figures 2-4.1 and 2-4.3)		•		
Modify the Grant County OR V Area boundary to include 320 acres of Reclamation land outside the RMP study area in the south half of Section 10, T18N, R28E and Grant County OR V Area lands. All Reclamation lands within the RMP study area would be designated "closed to OR V use" (see Figures 2-6.1 and 2-6.3)			•	
Retain the existing Grant County ORV Area boundary (includes the Eastern Dunes and Lower Crab Creek Arm management areas, 320 acres of Reclamation lands outside the RMP study area in the south half of Section 10, T18N, R28E and Grant County ORV Area lands). Within the Lower Crab Creek Arm management area, retain the existing ORV travel restriction "seasonally open" from July 1 to October 1, but limit ORV use to designated roads and trails only (see Figures 2-7.1 and 2-7.3)				•
Keep the Powerline Road "seasonally open" to motor vehicle travel/ORV use from July 1 through October 1	•			

^{*} Management action will vary by alternative

[•] Management action included in alternative

Management Actions	A	lteri	lternati				
Management Actions	A	В	С	D			
Off-Road Vehicle (ORV) Management (continued)							
Designate and keep the eastern portion of Powerline Road "seasonally open" to motor vehicle travel/ORV use unless future closure or other control measures are needed to achieve resource management objectives		•					
Close the Powerline Road to motor vehicle travel/ORV use except for administrative, maintenance or emergency purposes			•				
Designate and keep the Powerline Road "open year-round" to motor vehicle travel/ORV use				•			
Designate four ORV access routes between Sand Dunes Road and the west shore of Moses Lake as "open" to ORV riding, outside these four travel corridors, continue "Red Zone" year-round ORV closure				•			
Provide an ORV access route in Eastern Bluffs management area to connect the Eastern Dunes management area with the O'Sullivan Site-North				•			
Inventory and evaluate the presence of cultural resources and sites within the Eastern Dunes management area; modify ORV Area boundaries accordingly		•					
Inventory and evaluate the presence of cultural resources and sites within the Eastern Dunes and Eastern Bluffs management areas; modify ORV Area boundaries accordingly				•			
Restore/revegetate severely damaged areas closed to ORV use	•	•	•	•			
Fence the "Yellow" and "Green" zone boundary to prevent indiscriminate ORV entry into the Lower Crab Creek Arm management area; provide 3-4 access gates for authorized entry	•	•	•	•			

^{*} Management action will vary by alternative

[•] Management action included in alternative

Management Actions	A	lter	nati	ves
Wanagement Actions	A	В	С	D
Off-Road Vehicle (ORV) Management (continued)				
Fence the east side of Sand Dunes Road between South Outlet and Powerline Road to prevent indiscriminate ORV entry		•	•	•
Grazing Management				
Limit the grazing permit program at Potholes Reservoir to the existing 7,400-acre authorization under grazing permit TP-01		•		•
Phase-out WDFW's grazing permit program by allowing the existing permit (TP-01) to expire without renewal				
Keep livestock forage utilization on the 6,700-acre pasture within the North Potholes Reserve and Peninsula North management areas limited to no more than 600 AUMs from November 1 - March 15	•	•		•
Keep livestock forage utilization on the 700-acre pasture within the Upper West Arm management area limited to no more than 600 AUMs from March 15 to April 15	•	•		•
Construct fences, where needed, to prevent livestock trespassing onto Reclamation lands from adjacent lands			•	
Visitor Information and Interpretation				
Provide managed access, turnouts, signs, and/or interpretive trails and displays to enhance "watchable wildlife" viewing opportunities (see Figures 2-1, 2-4, 2-6, and 2-7)	*	*	*	*
Develop a public education/interpretive program to increase the public's awareness of Potholes Reservoir natural resources		•	•	•
Install signs at all developed recreation areas, boat launches, and other high public use areas		•	•	•
Post or modify existing signs to inform the public of relevant Grant County ordinances and regulations. Post "Pack-In/Pack-Out" signs	•	•	•	•
Develop an overall visitor guide/map for the Potholes Reservoir area		•	•	•

^{*} Management action will vary by alternative

[•] Management action included in alternative

Table 2-1
Summary of Alternatives and Management Actions
Potholes Reservoir RMP Final Environmental Impact Statement

Managament Astions	A	lter	nati	ves
Management Actions	A	В	С	D
Visitor Information and Interpretation (continued)				
Pursue the cooperative development of an "Environmental Education Center" within or near the Developed Corridor			•	•
Install additional "ORV Area" signs to clearly direct off-road vehicle users to the authorized Grant County ORV Area			•	•
Public Health and Safety/Environmental Protection				
Provide "minimum basic" on-shore restroom facilities (i.e., seasonal or permanent toilets) in high use areas where improper human waste disposal practices pose a public health or environmental hazard	*	*	*	*
Close roads (seasonally or permanently) in environmentally sensitive areas or where significant adverse environmental impacts have occurred	*	*	*	*
Install road gates, fencing, signs, and buoys as needed to implement seasonal and permanent closures		*	*	*
Increase the public's awareness of WDFW's "pack-in/pack-out" policy	•	•	•	•
Construct trails and boardwalks to control public access/foot traffic through wetland/riparian habitats in high use recreation areas (i.e., within the Developed Corridor)	*	*	*	*
Perform minor road improvements (i.e., grading and/or gravel placement) to improve vehicular access, public safety, and/or reduce soil erosion where continue road access is desirable		•	•	•
Permanently close and/or revegetate primitive roads not needed for public or a gency access			•	
Limit "Yellow Zone" motorized travel/ORV use to designated roads and trails only to protect wildlife habitat.				•
Maintain gravel primitive road network to discourage random motor vehicle travel	•			•
No additional firearm discharge restrictions. Currently, the discharge of firearms is prohibited in the ORV Area except from September 1 to February 1 and no guns are allowed in North Potholes Reserve and Potholes State Park, year-round.	•			•

^{*} Management action will vary by alternative

[•] Management action included in alternative

Table 2-1
Summary of Alternatives and Management Actions
Potholes Reservoir RMP Final Environmental Impact Statement

Management Actions		Alternatives		
		В	С	D
Public Health and Safety/Environmental Protection (continued)				
Prohibit the discharge of firearms in areas of wildlife species conflicts or for reasons of public safety in the Lind Coulee Arm, watchable wildlife areas, and other high use public recreation areas		•		
Prohibit the discharge of firearms reservoir-wide except from September 1 to February 1. Continue year-round prohibition on guns in North Potholes Reserve and Potholes State Park			•	

^{*} Management action will vary by alternative

Table 2-2
Key Management Actions by Management Area

MANAGEMENT AREA	ALTERNATIVE A NO ACTION	ALTERNATIVE B PREFERRED	ALTERNATIVE C PRESERVATION/ ENHANCEMENT	ALTERNATIVE D RECREATION DEVELOPMENT
NORTH POTHOLES RESERVE	 Open year-round for walk-in and non-motorized day use. Prohibit floating device use. Closed to dispersed camping except at Job Corps Dike Maintain grazing permit TP-01. except at designated sites. Restrict floating device use. Seasonally restrict public access in south/central portion (3/15-5/30). Maintain and enhance diking system. Maintain grazing permit Maintain grazing permit 		 Close to dispersed camping except at designated sites. Prohibit floating deviœ use. Seasonally restrict public access in south/central portion (3/15-5/30). Maintain and enhance diking system. Cancel grazing permit TP-01. Revegetate primitive roads not needed for public or agency access. 	 Close to dispersed camping except at designated sites. Allow non-motorized boats and other floating devices. Allow year-round public access in south/central portion. Maintain and enhance diking system. Maintain grazing permit TP-01. Develop North Potholes Reserve "watchable wildlife" area.
PENINSULA NORTH	 Open year-round to dispersed camping Maintain grazing permit TP-01. Develop "watchable wildlife" interpretive vehicle route 	Same as Alternative A	Same as Alternative A except • Cancel grazing permit TP-01.	Same as Alternative A
PENINSULA SOUTH	Open year-round to dispersed camping. Develop "watchable wildlife" interpretive vehicle route.	 Open year-round to dispersed camping. Develop "watchable wildlife" interpretive vehicle route. Provide vault toilet at Powerline Boat Launch. 	 Close to dispersed camping except at designated sites. Develop "watchable wildlife" interpretive vehicle route. Designate as HMA. Provide vault toilet at Powerline Boat Launch. 	 Open year-round to dispersed camping. Develop "watchable wildlife" interpretive vehicle route. Provide vault toilet at Powerline Boat Launch. Improve Powerline Boat Launch and parking area.

Table 2-2
Key Management Actions by Management Area

MANAGEMENT AREA	ALTERNATIVE A NO ACTION	ALTERNATIVE B PREFERRED	ALTERNATIVE C PRESERVATION/ ENHANCEMENT	ALTERNATIVE D RECREATION DEVELOPMENT
UPPER WEST ARM	 Open year-round to dispersed camping. Maintain grazing permit TP-01. 	 Seasonally closed to dispersed camping (3/15-6/30). Maintain grazing permit TP-01. Seasonal minimum wake restriction for watercraft (3/15-6/30). Designate as HMA Maintain and enhance diking system. 	 Close to dispersed camping. Cancel grazing permit TP-01. No motorized watercraft. Designate as HMA. Maintain and enhance diking system. Revegetate closed roads. 	Same as Alternative B
LOWER WEST ARM	Open year-round to dispersed camping.	Same as Alternative A	Same as Alternative A	Open year-round to dispersed camping. Develop "watchable wildlife" interpretive hiking trail.
DUNES/SAND ISLANDS	Open year-round to dispersed camping.	 Open year-round to dispersed camping. WDFW may seasonally close specific islands during critical wildlife breeding/ nesting periods or to improve vegetation restoration efforts. 	 Open year-round to dispersed camping. WDFW may seasonally close specific islands during critical wildlife breeding/nesting periods or to improve vegetation restoration efforts. Seasonal minimum wake restriction for watercraft (4/15-6/30). 	Same as Alternative B
MAIN RESERVOIR	No special management.	No special management	No special management.	No special management.

Table 2-2
Key Management Actions by Management Area

MANAGEMENT AREA	ALTERNATIVE A NO ACTION	ALTERNATIVE B PREFERRED	ALTERNATIVE C PRESERVATION/ ENHANCEMENT	ALTERNATIVE D RECREATION DEVELOPMENT
UPPER CRAB CREEK ARM	Open year-round to dispersed camping. Closed to ORV use.	 Seasonally close to dispersed camping (3/15-6/30) except at designated sites. Close to ORV use. Provide West Lake/North Outlet "watchable wildlife" area. Designate as HMA. Seasonal minimum wake restriction for watercraft (3/15-6/30). Maintain and enhance diking system. Fence east side of Sand Dunes Road between South Outlet and Powerline Road to prevent indiscriminate ORV entry. Provide parking turnouts and non-motorized access routes leading to west shore of Moses Lake. Designate and manage seven dispersed camping areas including North and South Outlets and five along west shore of Moses Lake. 	 Close to dispersed camping except at designated sites. Close to ORV use. Provide West Lake/North Outlet "watchable wildlife" area. Designate as HMA. Year-round minimum wake restriction for watercraft Maintain and enhance diking system. Fence east side of Sand Dunes Road between South Outlet and Powerline Road to prevent indiscriminate ORV entry. Provide parking turnouts and non-motorized access routes to west shore of Moses Lake (day-use only). Designate and manage dispersed camping areas at North and South Outlets. Close and revegetate primitive roads not needed for public or agency access. 	 Open year-round to dispersed camping except east of Sand Dunes Road. Close to ORV use. Provide West Lake/North Outlet "watchable wildlife" area. Maintain and enhance diking system. Fence east side of Sand Dunes Road between South Outlet and Powerline Road to prevent indiscriminate ORV entry. Provide ORV access routes leading to west shore of Moses Lake. Develop and manage seven primitive camping areas

Table 2-2
Key Management Actions by Management Area

MANAGEMENT AREA	ALTERNATIVE A NO ACTION	ALTERNATIVE B PREFERRED	ALTERNATIVE C PRESERVATION/ ENHANCEMENT	ALTERNATIVE D RECREATION DEVELOPMENT
LOWER CRAB CREEK ARM	Open year-round to dispersed camping. Open to motor vehicle travel/ORV use from July 1 - October 1. Keep the Powerline Road seasonally open to motor vehicle travel/ORV use from July 1 - October 1.	 Open year-round to dispersed camping. 919 acres closed to motor vehicle travel/ ORV use. Keep eastern portion of Powerline Road seasonally open to motor vehicle travel/ORV use. Develop interpretive trail. 	Open year-round to dispersed camping. Close to motor vehicle travel/ ORV use. Close the Powerline Road to motor vehicle travel/ORV use except for maintenance or administrative use. Develop interpretive trail	 Open year-round to dispersed camping. Open to motor vehicle travel/ORV use from July 1 - October 1. Keep the Powerline Road open year-round to motor vehicle travel/ORV use. Develop interpretive trail. Limit ORV use to designated roads and trails.
EASTERN DUNES	Open year-round to dispersed camping. Open to motor vehicle travel/ORV use year-round. Fence west boundary to control indiscriminate ORV entry into Lower Crab Creek Arm.	 Close to dispersed camping. Open to motor vehicle travel/ ORV use year-round. Fence west boundary to control indiscriminate ORV entry into Lower Crab Creek Arm. 	Close to dispersed camping. Close to motor vehicle travel/ ORV use. Fence west boundary to control indiscriminate ORV entry into Lower Crab Creek Arm.	Same as Alternative A
EASTERN BLUFFS	 Exclude approximately 105 acres of land located outside the "Green" zone from current ORV Area lease. Open year-round to dispersed camping. Closed to ORV use. 	 Close to dispersed camping. Close to motor vehicle travel/ ORV use. Install road gates to prevent motor vehicle entry. 	Same as Alternative B	Open year-round to dispersed camping. Provide ORV access route to connect Eastern Dunes and O'Sullivan Site. Limit motor vehicle travel/ORV use to ORV access route.

Table 2-2
Key Management Actions by Management Area

MANAGEMENT AREA	ALTERNATIVE A NO ACTION	ALTERNATIVE B PREFERRED	ALTERNATIVE C PRESERVATION/ ENHANCEMENT	ALTERNATIVE D RECREATION DEVELOPMENT
DEVELOPED CORRIDOR	 Open year-round to dispersed camping except in Potholes State Park and Mar Don Resort. Allow campground expansion in Potholes State Park. Develop asphalt-surfaced bike/pedestrian trail between Potholes State Park and O'Sullivan Dam. 	 Close to dispersed camping. Allow campground expansion in Potholes State Park. Develop asphalt-surfaced bike/pedestrian trail between Potholes State Park and O'Sullivan Dam. Allow camping at Blythe Boat Launch. Improve cartop boat launch at Blythe. 	 Close to dispersed camping. Allow campground expansion in Potholes State Park. Develop asphalt-surfaced bike/pedestrian trail between Potholes State Park and O'Sullivan Dam. Allow camping at Blythe Boat Launch. 	 Close to dispersed camping. Allow campground expansion in Potholes State Park. Develop asphalt-surfaced bike/pedestrian trail between Potholes State Park and O'Sullivan Dam. Transfer "lead agency" management to SPRC. Improve cartop boat launch and add courtesy docks at Blythe. (SPRC fee area)
O'SULLIVAN SITE - NORTH	Open year-round to dispersed camping.	 Close to dispersed camping. Develop as unit of Potholes State Park. Until developed: Provide seasonal toilets Fence parking area Day Use only 	Open year-round to dispersed camping. Transfer management to WDFW. Install two permanent vault toilets in O'Sullivan Beach area	Same as Alternative B
O'SULLIVAN SITE - SOUTH	Open year-round to dispersed camping.	Designate and manage as dispersed camping area until O'Sullivan Site - North is developed as Unit of Potholes State Park	Open year-round to dispersed camping Transfer management to WDFW	Same as Alternative B

Table 2-2
Key Management Actions by Management Area

MANAGEMENT AREA	ALTERNATIVE A NO ACTION	ALTERNATIVE B PREFERRED	ALTERNATIVE C PRESERVATION/ ENHANCEMENT	ALTERNATIVE D RECREATION DEVELOPMENT
WEST LIND COULEE ARM	Open year-round to dispersed camping.	 Close to dispersed camping except at designated sites. Designate and manage seven dispersed camping areas. Provide seasonal toilets in high-use areas. Allow camping at Glen Williams and Road "M" Boat Launch sites. Provide courtesy docks at Glen Williams Boat Launch. 	 Close to dispersed camping except at designated sites. Designate and manage five dispersed camping areas. Provide seasonal toilets in high-use areas. Allow camping at Glen Williams and Road "M" Boat Launch sites. Provide courtesy docks at Glen Williams Boat Launch. Close and/or revegetate primitive roads not needed for public or agency access. 	 Close to dispersed camping except at designated sites. Designate and manage two dispersed camping areas. Provide seasonal or permanent vault toilets in high-use areas. Allow camping at Glen Williams and Road "M" Boat Launch sites. Provide courtesy docks at Glen Williams Boat Launch. Designate and manage five primitive camping areas.
EAST LIND COULEE ARM	Open year-round to dispersed camping. Develop Lind Coulee North Arm "watchable wildlife" area.	Close to dispersed camping except at designated sites. Develop Lind Coulee North Arm "watchable wildlife" area.	 Close to dispersed camping. Develop Lind Coulee North Arm "watchable wildlife" area. Designate as HMA. No motorized watercraft. Close and revegetate primitive roads not needed for public or agency access. 	 Open year-round to dispersed camping. Develop Lind Coulee North Arm "watchable wildlife" area. Provide seasonal toilets in high-use areas. Designate and manage one dispersed camping area. Open two miles of closed primitive road to motor vehicle travel.

Table 2-2
Key Management Actions by Management Area

MANAGEMENT AREA	ALTERNATIVE A NO ACTION	ALTERNATIVE B PREFERRED	ALTERNATIVE C PRESERVATION/ ENHANCEMENT	ALTERNATIVE D RECREATION DEVELOPMENT
SUMMARY	Maintains recreation facilities at current levels outside of Potholes State Park. Retains the existing Grant County ORV Area. Recreation improvements made as-needed and as funding permits. Land use and resource management decisions made on an <i>ad hoc</i> basis.	Establishes two HMAs. Provides for future recreation development, moderately controlled access and dispersed camping, a smaller ORV Area, as well as the preservation and enhancement of natural and cultural resources.	Establishes four HMA's, minimizes recreation development, and closes all Reclamation lands within the RMP study area to ORV use. Excludes recreation development at the O'Sullivan Site and transfers management to WDFW. Closes and rehabilitates primitive roads not needed for public or agency access.	shore of Moses Lake and through the Eastern Bluffs management

Table 2-3 Comparison of Environmental Effects by Alternative Potholes Reservoir

Environmental		Environme	ental Effects	
Indicator	Alternative A	Alternative B	Alternative C	Alternative D
Air Quality (4.1)				
Attainment of National Ambient Air Quality Standards and Criteria	yes	yes	yes	yes
Soils (4.2)				
Soil Productivity potential loss	high	moderate	low	high
Soil Erosion, disturbance and compaction increase probability	high	moderate	low	high
Surface Water Quality (4.3.3)				
Potential for change in turbidity, sedimentation, water temperature, and non-point contamination	moderate	low	moderate	low
Ground Water Quality (4.3.4)				
Potential for change in recharge rates and flow patterns, and changes in water chemistry from organic or inorganic contamination.	low	low	low	low
Vegetation (4.4)				
Acres of suitable habitat managed for:				
- development (State Parks)	11	91	11	3,354
- ORV parks	3,354	2,435	1,227	13.9
- roads/trails	2.5	3.3	-18.2 (less)	52
- agriculture	52	52	52	7,400
- grazing	7,400	7,400	0	
Acres of designated Habitat Management Areas				1,964
	0	3,950	7,166	

Alternatives: A=No Action, B=Preferred Alternative, C=Natural Resource Conservation , D=Recreation Development

Table 2-3 Comparison of Environmental Effects by Alternative Potholes Reservoir

Environmental	Environmental Effects				
Indicator	Alternative A	Alternative B	Alternative C	Alternative D	
Vegetation (4.4) (continued)					
potential for reduction in noxious weed	low	moderate	high	low	
Affect on Special Status Plant Species	low beneficial effect	moderate beneficial effect	high beneficial effect	low beneficial effect	
Wildlife (4.5)					
Potential for adverse effects to wildlife from loss of suitable habitat and changes in recreational use	high	moderate	low	moderate-high	
Special Status Wildlife Species	low beneficial effect	moderate beneficial effect	high beneficial effect	low beneficial effect	
Fish (4.6)					
Overall fishery disturbance, harassment and habitat destruction	moderate - high	moderate	low	high	
Cultural (4.8)					
Potential disturbance factors affecting cultural site integrity (non-inventoried areas, undiscovered)	high	moderate	low	high	
Indian Trust Assets (4.9)					
Change in Indian Trust Assets	no change	no change	no change	no change	
Visual Quality (4.10)					
Change in visual quality and scenic quality rating	no change	no change	no change	no change	

Alternatives: A=No Action, B=Preferred Alternative, C=Natural Resource Conservation , D=Recreation Development

Table 2-3 Comparison of Environmental Effects by Alternative Potholes Reservoir

Environmental		Environme	ental Effects	
Indicator	Alternative A	Alternative B	Alternative C	Alternative D
Noise (4.11)				
Increased Levels	no change	no change	no change	no change
Land Use (4.12)				
Study area land base impacted by land use change	139	5,827	15,003	2,744
Recreation (4.13)				
Acres of dispersed camping available open year round/seasonal closed except designated	14,753 3,831	12,595 6,529	6,164 12,420	13,948 4,636
Acres of increased developed recreation opportunities/capacity to accommodate public demand	11	91	11	91
Fishing access	no change	improved	less than existing	greatly improved
Acres of off-road vehicle (ORV) riding opportunities available	3,354	2,435	1,227	3,354
Social Economic Resources (4.14)				
Degree of Acceptability	moderate	moderate	low	moderate-high

Alternatives: A=No Action, B=Preferred Alternative, C=Natural Resource Conservation , D=Recreation Development

- Evaluate the need to control the spread of Russian olive (*Elaeagnus angustifolia*).
- Continue to maintain a baseline for reservoir water quality data at existing inlet and outlet sampling stations for routine water quality parameters (pH, alkalinity, nitrates, phosphates, etc.).
- Plan and prioritize future actions for Columbia Basin Project (CBP) waters and collaborate these actions through the Oversight Panel consisting of Reclamation, WDOE, Environmental Protection Agency (EPA), and CBP Irrigation District representatives. These actions include the following.
 - Develop appropriate water quality standards for Potholes Reservoir including uses and criteria.
 - Identify current and future water quality monitoring needs and determine which of these are appropriate for federal, state, or local accomplishment.
 - Develop water quality management plans for those waters identified in Section IV D of the MOA.
- Continue historic and ongoing water quality monitoring programs; modify or expand these programs as necessary to make the determinations called for in Section IV A and IV B of the CWA.
- Semiannually review reservoir water quality data through the Oversight Panel and modify water quality monitoring needs as necessary.
- Potholes Reservoir (Grant County) is within a Washington Department of Ecology (WDOE) sanctioned GWMA. Coordinate actions developed during the "Ground Water Management Area" process with Potholes Reservoir management.
- Seek funding for fishery studies designed to determine what factors are limiting the reservoir fishery and what regulatory and/or habitat improvement measures could be taken to reverse the present decline in fish species, populations, and angler success rates. The impact of fish-eating birds (i.e., cormorants) on the reservoir fishery will also be investigated.

• Coordinate with the WDFW, Washington Natural Heritage Program, WDNR, and Bureau of Land Management (BLM) to exchange information on local rare plant distributions and status.

Cultural Resources:

- Conduct Class III surveys and prepare a Cultural Resource Management Plan (CRMP). The CRMP will outline specific actions and methods to protect cultural resources.
- Coordinate with Native Americans with interests at Potholes Reservoir to prepare the CRMP and manage cultural resources.

Recreation:

- Identify and implement a fee structure, within current legal authorities, to generate additional revenues for SPRC and WDFW operation, maintenance, and management functions.
- Coordinate and work with the Washington Department of Transportation (WDOT) to address congestion problems along State Route 262 during peak recreation periods.
- Provide accessible facilities for persons with disabilities in all new developments or redevelopments as required by Section 504 of the Architectural Barriers Act.
- Provide a fishing jetty or breakwater for the physically challenged in Potholes State Park.
- Provide additional campsites and associated facilities within Potholes State Park.
- Continue to manage the Dunes/Sand Islands management area for dispersed recreation (e.g., camping, wildlife observation, picnicking, and sunbathing). No recreation improvements or sanitation facilities would be provided and trash would continue to be managed under a pack-in/pack-out policy.
- Hunting would continue to be allowed on all Reclamation lands consistent with existing State and local regulations. Public hunting and trapping is currently

allowed throughout the RMP study area except within North Potholes Reserve and Potholes State Park.

If human waste and trash disposal becomes a significant public health concern in the future, area and site closure, seasonal portable or floating toilets, and/or other management strategies would be examined by the WDFW and the Reclamation and corrective action(s) taken. Opportunities for public review and comment would be provided prior to adopting and implementing any management changes affecting public use.

• Work with the WDOT to complete a 1.7 mile asphalt-surfaced bicycle/pedestrian trail between Potholes State Park and O'Sullivan Dam (see Figure 2-2.1). This phase of the trail would link the Mar Don Resort and Potholes State Park.

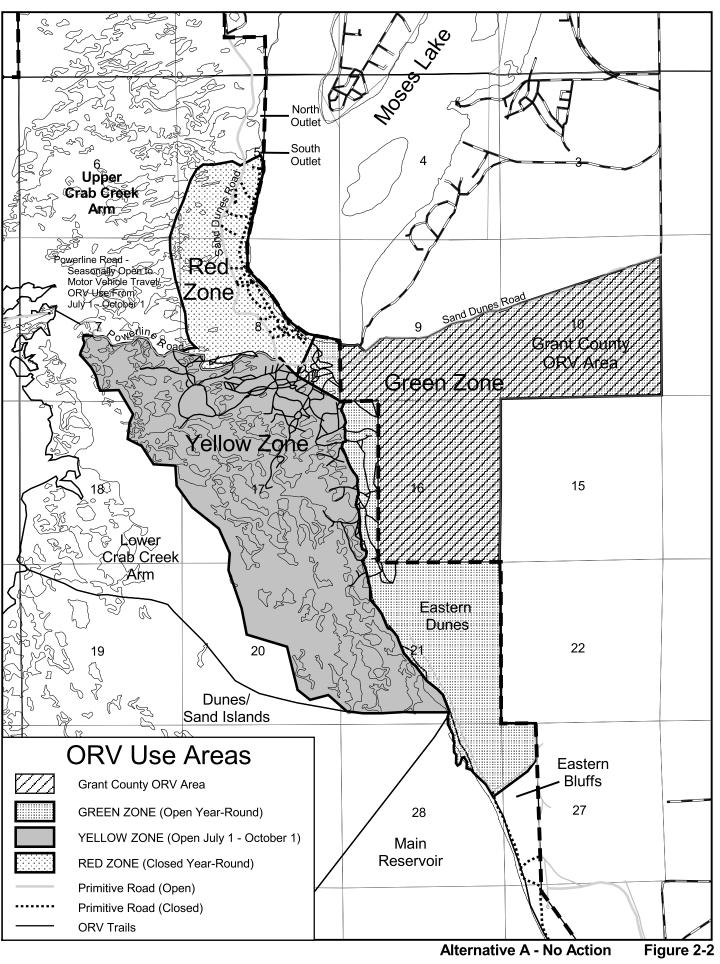
Land Use and Administration:

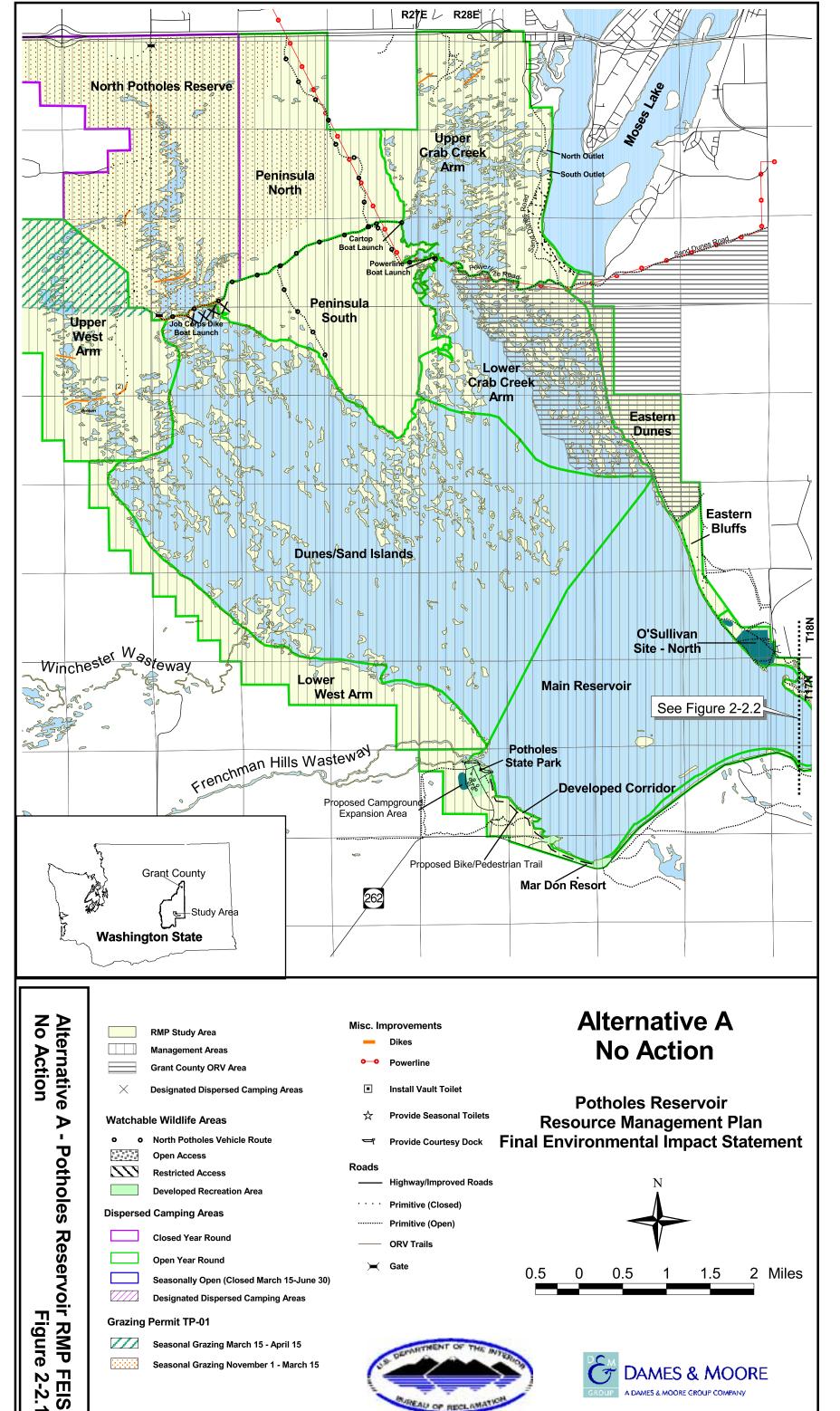
- Continue to meet all contractual obligations of the 1968 contracts between the U.S. and Columbia Basin Project irrigation districts.
- Continue to operate Potholes Reservoir in accordance with Reclamation law and the Columbia Basin Project Act dated March 10, 1943 (Chapter 14, 57 STAT, 14).
- Continue to administer Reclamation lands and waters through an updated MOA between the United States and the State of Washington. Day-to-day resource and recreation management activities will continue to be provided by the SPRC and WDFW with oversight by the Reclamation.
- Continue the 52-acre agricultural lease program in the Lind Coulee Arm for the benefit of wildlife. The purpose of the lease program (to produce food and cover for wildlife and manage the land for continued multi-purpose recreation), the existing prohibition on livestock grazing, and the requirement to keep the land open at all times for lawful public hunting and other recreational uses will be retained in all new or renewed leases. Lease administration will remain with the WDFW.
- Renew the 30-acre recreational lease agreement between the SPRC and the Washington Department of Natural Resources (WDNR) to operate and maintain a recreational resort on Reclamation land. The existing Mar Don Resort

- occupies both Reclamation and WDNR lands and is operated under a lease agreement (No. 62395) issued and administered by the WDNR.
- Update the 1997 Memorandum of Understanding (MOU) between the WDFW and Grant County Mosquito Control District #1 to reflect changes in resource needs (i.e., leopard frogs) and mosquito control technologies. The Reclamation should review and agree with the changes in the MOU scheduled for 2002.

Under the existing MOU, the District has agreed to prepare a "Master Plan" outlining their annual spraying operations and to use biological pesticides as their primary pesticide. The WDFW has agreed to mark protected waters with buoys.

- Continue integrated pest management for mosquito control in accordance with an updated and renewed MOU. WDFW's goal is to avoid or minimize the use of chemical controls that could impact non-target species important to the food chains of local fish and wildlife species.
- Continue fire protection at Potholes Reservoir under the fire protection contract between the WDFW and Grant County Fire Protection Districts 4, 5 and 11.
- Prohibit houseboats in any environment at Potholes Reservoir. No houseboat is permitted in any environment under the Grant County Shorelines Management Master Program dated June 1975.
- Identify and abate unauthorized uses and trespass violations on Reclamation lands. Based on regular surveillance of lands and resources where a high probability of unauthorized uses exist (i.e., adjacent to private croplands), detect, confirm and abate, all unauthorized uses or trespass violations.
- Coordinate, to the extent practicable, Potholes Reservoir land use activities and plans with Grant County planning efforts (e.g., Comprehensive Plan and Shorelines Master Program) and ordinances.
- For all commercial activities on Reclamation lands, insure all new or renewed concession contracts issued by the State are consistent with the directives and standards outlined in the Reclamation's concessions management policy for non-federal managers (as directed in Departmental Manual LND 04-02). The State is required to receive a fair market return of revenue under this policy.

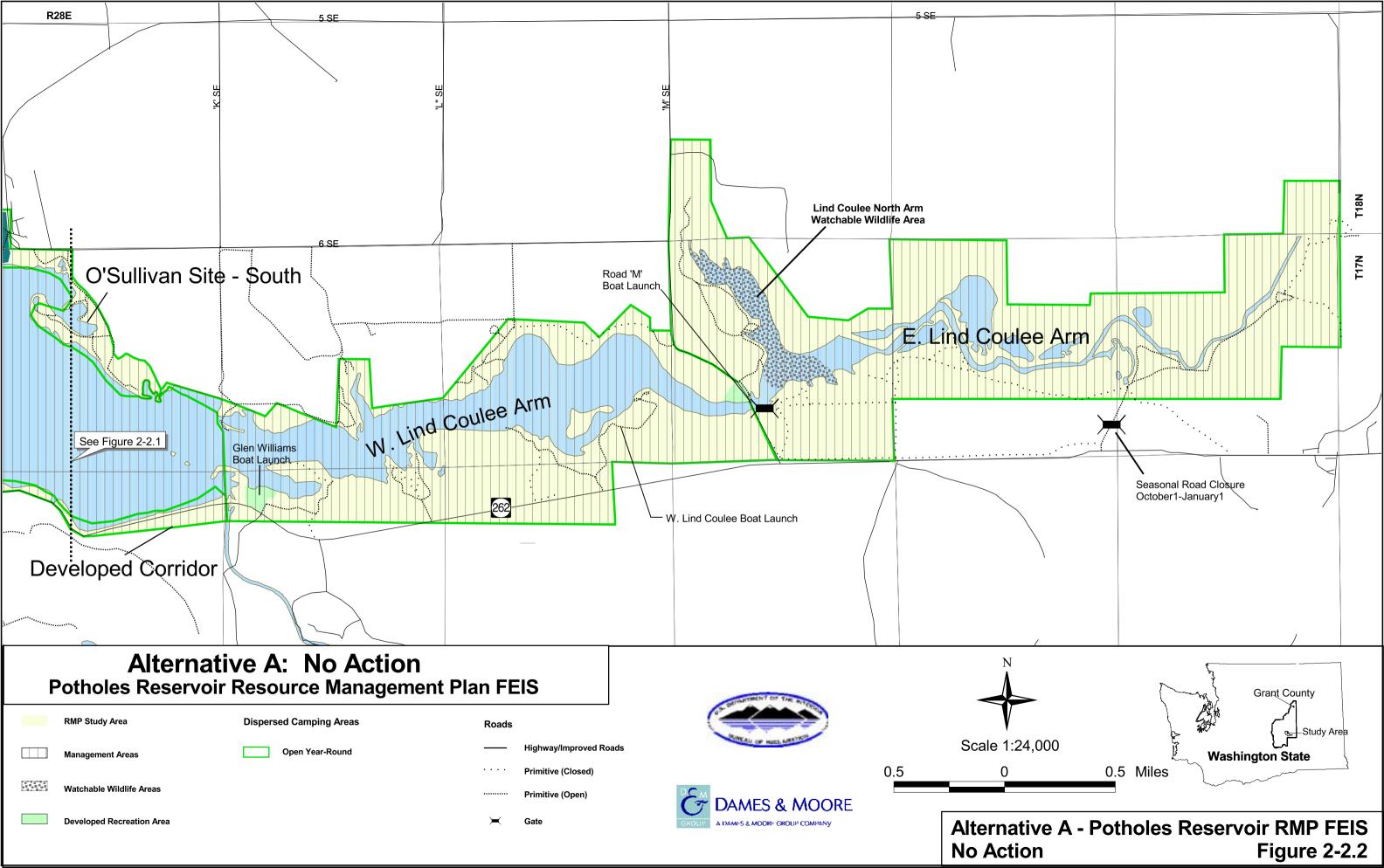






Seasonal Grazing March 15 - April 15 Seasonal Grazing November 1 - March 15





- Limit concession contract administration by the SPRC to SPRC administered lands and on WDFW administered lands to the Reclamation.
- Amend land use agreements (MOAs) between the WDFW and SPRC to reflect current "lead agency" management and jurisdictional authorities.
- Continue discussions with the WDNR to establish guidelines for land use activities on WDNR-leased lands.

Off-Road Vehicle Management:

- Control or eliminate ORV use and/or motorized travel in environmentally sensitive areas.
- All Reclamation lands are closed to motorized travel except for those roads and areas designated "open" for such use.

Visitor Information/Interpretation:

- Develop "Watchable Wildlife" sites and interpretive trails in concert with the statewide Watchable Wildlife Program administered by the WDOT and WDFW.
- Install signs to clearly identify public access routes on Reclamation land. Post signs along major roadways to indicate key road access points.

Public Health and Safety/Environmental Protection:

- Identify and restrict access to areas that present public safety concerns.
- Control dispersed camping in environmentally sensitive areas with appropriate site improvements, access and seasonal restrictions, or site closure.
- Prior to any action which would modify the environment, the State will submit any necessary environmental reports as directed by the Reclamation. The Reclamation will be responsible for compliance with the National Environmental Policy Act. No such modification of the environment will be authorized without written approval from the Reclamation.

• Encourage volunteer efforts to accomplish resource management programs and objectives. Work with user groups, clubs, and civic organizations to promote volunteer cleanup projects and a "pack-in/pack-out" ethic.

2.5 DETAILED DESCRIPTION OF THE ALTERNATIVES

This section details the four alternatives evaluated in Chapter 4, "Environmental Consequences," and describes the specific management actions and plan elements and features included in each alternative. The comparative summary of the management actions and consequences by alternative were previously provided in Tables 2-1, 2-2, and, 2-3 (see section 2.4).

2.5.1 Alternative A - No Action

Under this alternative, current land use, recreation and resource management activities would continue under existing laws and policies, land use practices, management plans, and agreements. Specific resource management actions or activities identified by the SPRC and/or WDFW would continue to receive Reclamation review and oversight as necessary. Figures 2-1, 2-2.1 and 2-2.2 summarize future conditions and actions without a comprehensive RMP for Potholes Reservoir.

In addition to the common management actions outlined above, the Reclamation and/or the State (WDFW and SPRC) would:

Natural Resources:

- Coordinate with relevant resource personnel and adapt management strategies to avoid or minimize effects on federal or state listed threatened and/or endangered species including the Washington ground squirrel which is a species of concern.
- Review and comment on other agency actions and management plans affecting land and water resources in or adjacent to the study area.

Cultural Resources:

- Conduct Class III surveys and prepare a Cultural Resource Management Plan (CRMP). The CRMP will outline specific actions and methods to protect cultural resources.
- Coordinate with Native Americans with interests at Potholes Reservoir to prepare the CRMP and manage cultural resources.
- Obtain location-specific cultural resource clearances when agency actions, such as recreation enhancements or facility development occur; avoid adverse effects on cultural resource sites by relocating or redesigning any proposed development.
- Conduct consultations, per 36 CFR 800, to determine site eligibility, project effect, and appropriate treatment of adversely affected Register-eligible sites.
- Determine whether cultural resource sites are present on involved lands when permits and leases for grazing, agriculture, recreation, or other actions involving Reclamation lands are under consideration for issuance or for renewal. If National Register eligible or unevaluated sites are present, the Reclamation would determine if the authorized use could affect those sites. If damage could occur or is occurring, the Reclamation would work with the WDFW to consider altering the land use agreement to exclude use of the site or include conditions that would avoid or reduce damage.
- In accordance with the Native American Graves Protection and Repatriation Act
 (NAGPRA) initiate actions to protect or remove human burials if they are
 reported to be exposed or endangered by reservoir operations, natural erosion,
 or land use activities.
- Initiate cultural resource investigations and consultations if future developments are proposed in areas not previously surveyed. If cultural resources are present in a proposed development area, avoid disturbing the site, or, if avoidance is not possible, avoid or minimize the adverse effect(s) with appropriate management or mitigative actions. Management actions would be defined in a MOA with the Washington State Historic Preservation Office (SHPO) and the Advisory Council on Historic Preservation (the Advisory Council). Native Americans

with interests at Potholes Reservoir would be consulted, as appropriate, to identify, protect, or mitigate effects to sacred or traditional cultural properties.

• Implement public education programs to reduce accidental damage to or vandalism of cultural resources, and promote resource protection by the public.

<u>Recreation</u>: Dispersed, unstructured activities outside the Developed Corridor (e.g., Potholes State Park/Mar Don Resort) would continue to typify public recreation at Potholes Reservoir. Under the No Action Alternative, future recreational activities are expected to be managed by the Reclamation, SPRC, and/or WDFW as follows:

Recreation Sites and Improvements:

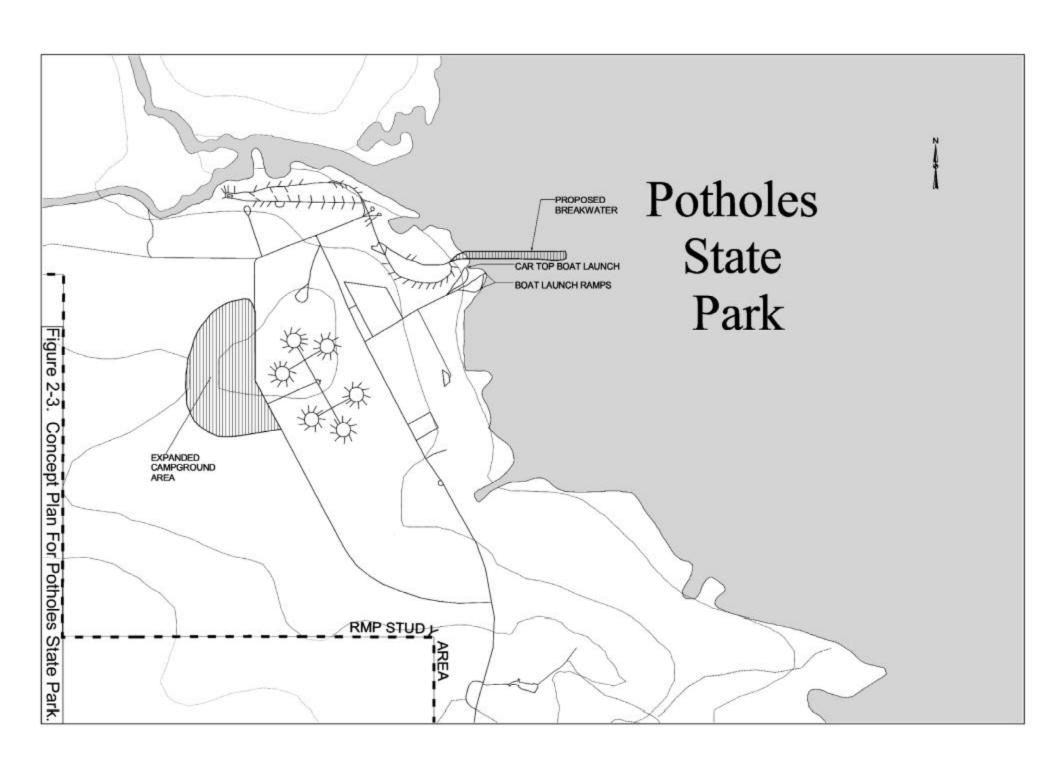
Dispersed Camping

• Continue to allow dispersed, unregulated camping in all areas except North Potholes Reserve and Potholes State Park provided that natural or cultural resources are not jeopardized. Active management of dispersed recreation sites would not occur unless monitoring indicates a need for such management in the future. A policy of "pack-in/pack-out" would continue in all dispersed (undeveloped) or primitive (minimally developed) camping areas.

Developed Recreation Areas

• Allow the future expansion of recreation facilities and services within Potholes State Park. The SPRC would be authorized to expand present sites and facilities when future public recreation demand and facility use warrant additional development.

An estimated 11-acre campground expansion area has been identified by the SPRC just west of the existing campground area (see Figure 2-2.1). The concept plan for Potholes State Park (see Figure 2-3) would provide approximately 100 individual campsites, several group campsites, and associated facility amenities and services (restrooms, showers, parking areas, pathways, and centralized trash collection) within the expansion area. Actual facility and site development is expected to occur when recreation demand exceeds existing state park facility and site capacities and sufficient capital improvement funds are available.



Other Recreation-Related Actions

• When new recreation sites or facilities are warranted, expansion within existing recreation areas would receive priority over new site development. Future development proposals would be based on public facility needs, recreation demand, and environmental protection requirements.

Land Use and Administration:

Modify the land use agreement between the WDFW and Grant County to operate
and maintain an ORV Area to include only those Reclamation lands located in
the existing "Green" and "Yellow" zones (see Figure 2-2). Exclude those lands
(approximately 105 acres) in the Eastern Bluffs management area that are
currently included in the existing ORV Area lease, but situated outside the
"Green Zone" boundary.

Off-Road Vehicle Management:

• Continue present ORV management practices and zone restrictions. ORV riding within the RMP study area would continue to be limited to the "Yellow" and "Green" zones located in the Lower Crab Creek Arm and Eastern Dunes management areas, respectively (see Figures 2-2 and 2-2.1). No new areas would be designated "open" nor would season-of-use changes be made.

Under existing management, the 433-acre "Red Zone" would remain "closed" to motor vehicle travel and ORV use; the 1,459-acre "Yellow Zone" and 1.7 mile Powerline Road would remain "seasonally open" from July 1 to October 1; and the 1,895-acre "Green Zone" would remain "open year-round." The Grant County ORV Area designated for ORV riding would remain unchanged and encompass Reclamation lands both inside and outside the RMP study area as well as Grant County ORV Area lands adjacent to the study area. Grant County would construct a fence between the "Yellow" and "Green" zones with 3 to 4 access gates to reduce unauthorized and indiscriminate ORV entry into the "Yellow Zone."

• Specific to ORV use, when ORV use causes substantial damage to land, soil, water, wildlife, wildlife habitat, archeological, historic or vegetative resources, affected areas and trails would be immediately closed to ORV use or appropriate controls established to prevent further deterioration of the environment (Executive Orders 11644 and 11989). No area, road or trail would be reopened

until the adverse effects have been eliminated and measures have been implemented to prevent recurrence.

If substantial resource damage is found, areas and roads currently not posted would be signed to reflect closure. Fencing and other physical barriers would not be used unless signs prove ineffective.

- Coordinate ORV management strategies with WDFW and Grant County to minimize damage or human interference to wildlife or wildlife habitat within the Grant County ORV Area.
- Limit motor vehicle access outside the Grant County ORV Area to existing roads and parking areas designated "open" for motorized use. All existing road closures would remain in effect.

Grazing Management:

- Renew the existing 7,400-acre grazing permit (TP-01) provided the lands are grazed in a manner which maintains and enhances the North Potholes Reserve shrub-steppe community. The objective of this permit is to use a light winter and early spring grazing treatment to improve the perennial bunchgrass component of the native shrub-steppe community. The Reclamation reserves the right to request WDFW termination of any permit at the end of any year if such termination is desirable to comply with other federal programs or resource needs.
- Continue to limit TP-01 grazing use to no more than 600 AUMs per season (November 1 until April 15).
- WDFW will monitor and evaluate livestock grazing in permitted use areas twice annually and modify permit conditions and Grazing Plans accordingly. No more than 40 percent of the forage produced annually will be removed under the Grazing Plan.
- WDFW reserves the right to alter and change the provisions of the Grazing Plan to include reduction in acres of pasture available and number of AUMs authorized when such changes are required to benefit fish or wildlife management, public hunting, or other recreational uses.
- WDFW reserves the right to cancel a permit in the event the area described in the permit is included in a land use plan determined to be a higher and better use.

Visitor Information/Interpretation:

- Provide managed access, turnouts, signs, brochures (e.g., "Birds of Potholes Reservoir"), and/or interpretive displays to enhance "Watchable Wildlife" viewing opportunities at the following locations (see Figures 2-2.1 and 2-2.2 for specific site locations):
- North Potholes Vehicle Route: Develop an interpretive vehicle trail utilizing the existing North Potholes gravel road system with stops at the Cartop Boat Launch, Powerline Boat Launch, Peninsula South overlooks and turnouts, and Job Corps Dike. This route would provide outstanding interpretive opportunities for viewing waterfowl, waders, shorebirds, raptors and songbirds. Species of reptiles, amphibians, furbearers and mule deer also occur in the area.

Interpretive maps, brochures, reader boards and possibly short loop trails would be used to aid visitor understanding of the area's local ecology and wildlife diversity. The vehicle trail would also provide quality recreation and educational opportunities for senior citizens or those less able to experience the Potholes area on foot.

Lind Coulee North Arm: Install parking lots, short trails with blinds, or, more simply, strategic parking turnouts where wildlife can be viewed from vehicles. Under either scenario, interpretive signs would be designed and installed so they can be viewed from vehicles. This area provides excellent opportunities to view migrant shorebirds and concentrations of waterfowl during late summer and early fall when mudflats become exposed.

Public Health and Safety/Environmental Protection:

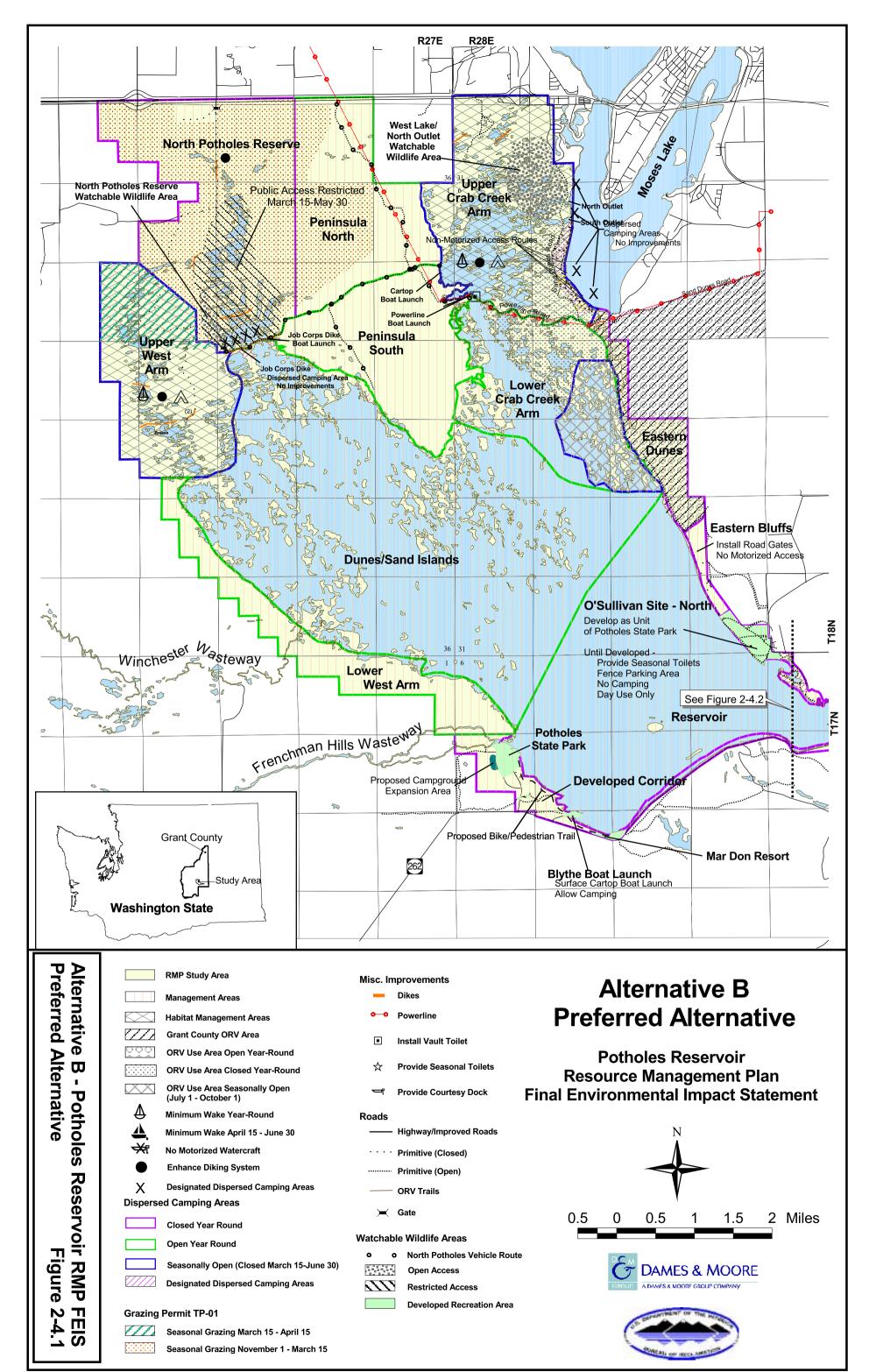
- Provide "minimum basic" on-shore restroom facilities (i.e., seasonal portable toilets or permanent vault toilets) in high use areas where improper human waste disposal practices pose a public health or environmental hazard.
- Close roads (seasonally or permanently) in environmentally sensitive areas or
 where significant adverse environmental impacts have occurred. The
 Reclamation policy is to ensure that the use of motor vehicles on Reclamation
 lands will be controlled and directed so as to protect the land resource, promote
 the safety of all users, and minimize land use and user conflicts. Reclamation

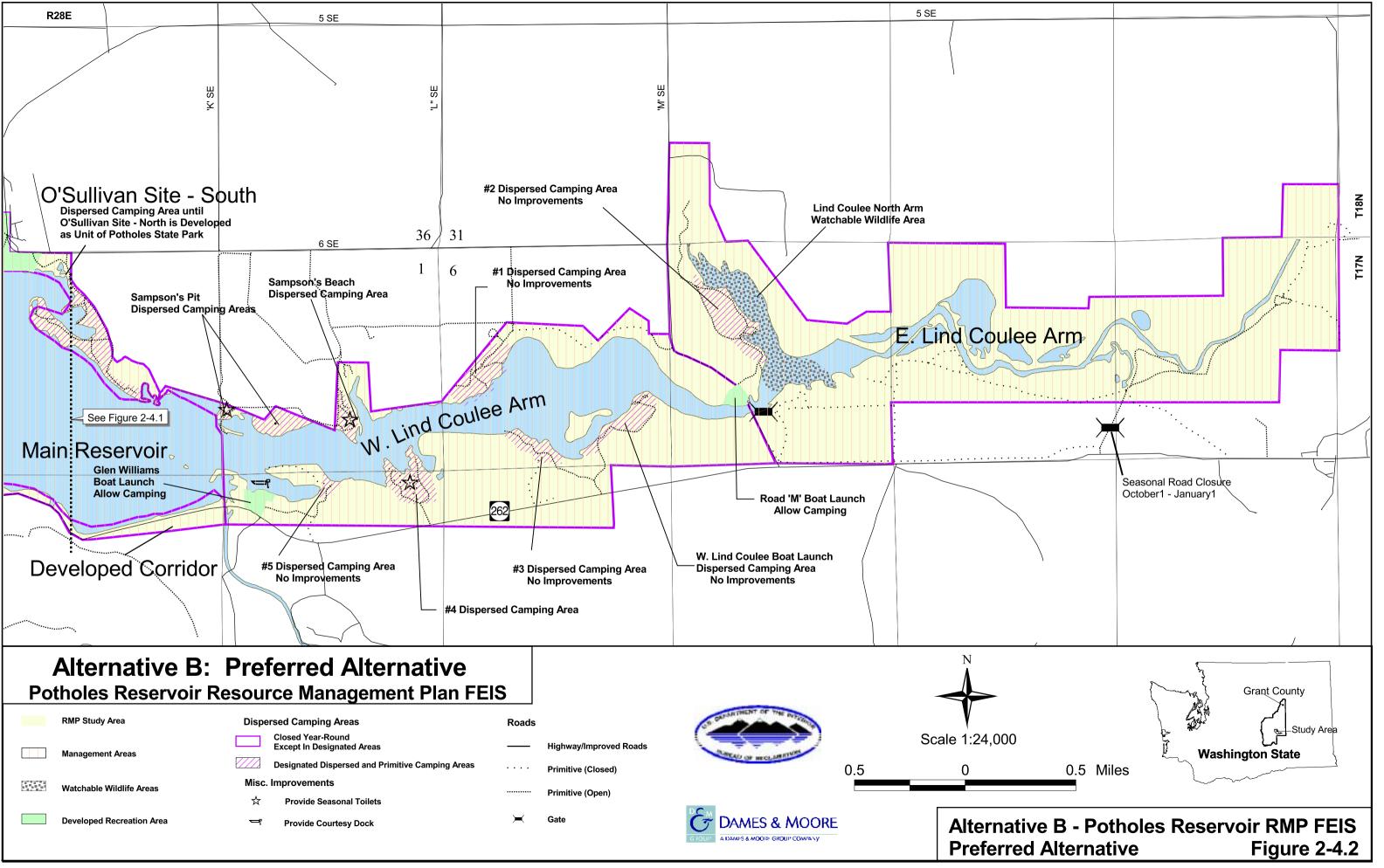
lands are closed to motorized travel except for areas, roads or trails designated "open" for such use. Under existing management, approximately 17.7 miles of the gravel/primitive road network are permanently closed to motor vehicle travel and 3.2 miles are seasonally closed.

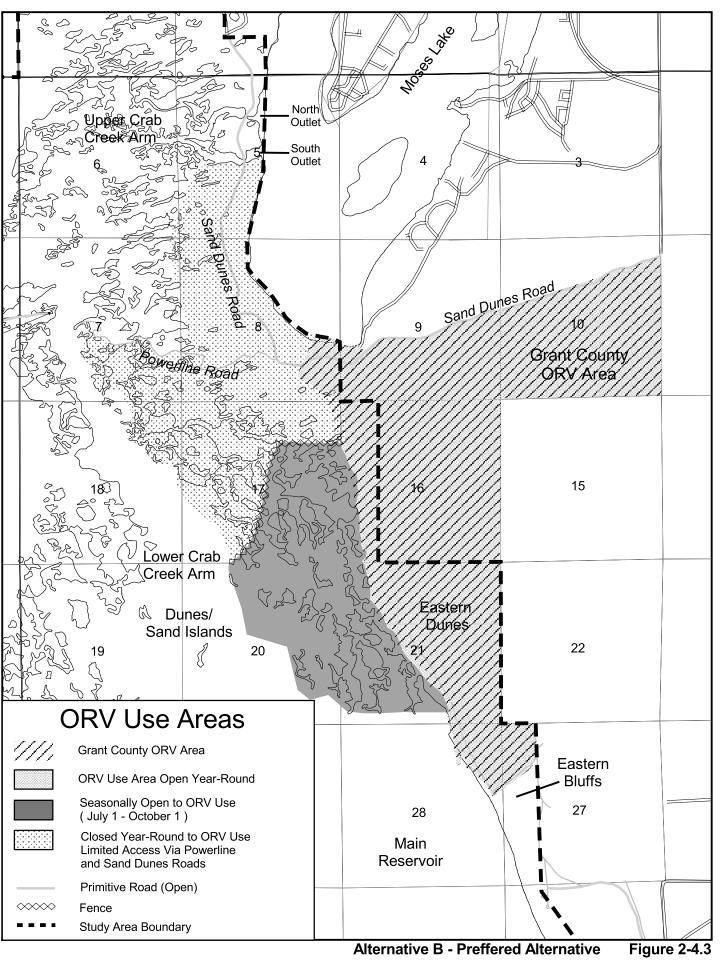
- Maintain 42.6 miles of the gravel/primitive road network open year-round or seasonally to discourage random motor vehicle travel.
- Bureau of Reclamation and the state would enter into cooperative agreements with other federal and state officials, and/or the Grant County Sheriff's Office to enforce laws and regulations applicable to the Potholes Reservoir study area. Self-regulation and voluntary compliance among recreational users would be the preferred management approach.
- Continue to prohibit motorized boats, motor vehicles, and floating devices in North Potholes Reserve. The reserve would remain open for "walk-in" and non-motorized day use activities (hunting, fishing, wildlife observation, picnicking, etc.) year-round.
- Minimum wake restrictions and other boating restrictions for the safety of boaters, swimmers, and others using the waters of Grant County would be governed by Grant County Boating Ordinance 6.08, as amended.
- Continue existing firearm discharge restrictions. Currently, the discharge of firearms is prohibited within the ORV Area except from September 1 February 1, and no guns are allowed in North Potholes Reserve and Potholes State Park, year-round.

2.5.2 Alternative B - Preferred

The Preferred Alternative provides for future recreation development, controlled access and dispersed camping, a reduction in the acres of seasonal ORV use area, and the preservation and enhancement of natural and cultural resources. Implementation of Alternative B would facilitate greater coordination among the many agency programs, plans, and actions as they apply to Reclamation lands in the RMP study area. The plan elements featured in this alternative are summarized on Figures 2-4.1, 2-4.2 and 2-4.3 and include the following.







<u>Natural Resources</u>: In addition to the management actions described under Alternative A, Alternative B includes additional actions to minimize and correct soil and shoreline erosion problems; restore and protect vegetation, habitat diversity, wildlife, and water quality; and enhance visual quality. Specifically, the Reclamation and/or the State (WDFW and/or SPRC) would:

Soil Conservation and Erosion Control:

- Conduct an integrated erosion inventory and control program to identify and prioritize eroded features and areas, unstable landforms, and areas susceptible to soil erosion and/or compaction. The Reclamation and the State would identify corrective measures, prioritize areas to be rehabilitated, and develop a monitoring program to assess program results.
- Implement shoreline erosion control measures with an initial emphasis on protecting cultural resources and public facilities in developed recreation areas. Specific erosion control measures would be identified on a site and project-specific basis and likely include the construction of retaining walls, the placement of rock revetments or gabions, vegetative plantings, or other such measures to halt the process of shoreline retreat.
- Limit or eliminate motorized travel or recreation activities on soils sensitive to compaction, high soil erosion potential rating, and/or exhibit existing accelerated erosion problems.
- Post signs or install barriers to close (seasonally or permanently) those portions of the primitive road system where erosion is a problem.
- Control soil and shoreline erosion and wetland and riparian habitat degradation in high use areas within the Developed Corridor by providing water access via constructed trails and boardwalks. Obliterate and restore random trails.
- Monitor and evaluate the success of soil conservation and shoreline erosion control projects. Adjust the specific methods and techniques employed when project success needs improvement.

Vegetation and Weed Control:

- Where feasible, restore and rehabilitate areas presently degraded by land use activities. Restoration efforts would initially focus on areas severely damaged by vehicular access and/or dispersed camping where such access or use would be terminated. Revegetation efforts would use plants native to the area and beneficial to wildlife and special status species. The exact plant mix and planting densities to be used would be determined by the WDFW.
- In the Lower Crab Creek Arm management area, 919 acres of the ORV "Yellow Zone" would be permanently closed to motorized travel and rehabilitation efforts initiated in severely damaged areas. The WDFW would locate and develop from one of the closed trails, an interpretive walkway to illustrate habitat restoration efforts.
- Support private initiatives and volunteer efforts to plant native species in areas identified for habitat enhancement or site rehabilitation projects.
- Minimize the acreage of irrigated grass in Potholes State Park to maintain quality shrub-steppe habitat.
- Monitor and evaluate the success of vegetation rehabilitation and natural revegetation projects. Adjust the specific methods and techniques employed when project success needs improvement. If natives are the dominant cover type, no supplemental rehabilitation measures (e.g., plantings) would be needed.
- Allow limited use of spot herbicide applications to kill small patches of Eurasian watermilfoil affecting public boat ramps, courtesy docks and swimming areas, and to protect wildlife habitat value (e.g., maintain open water for waterfowl resting and feeding). Additionally, allow herbicide applications to kill patches of purple loosestrife that are colonizing wetlands and reducing/eliminating their suitability as wildlife habitat. Prior to herbicide use, the potential short- and long-term effects on special status species (e.g., leopard frog) would be evaluated.
- Mechanically remove by cutting salt cedar trees (*Tamarix*) before they become heavily established.

Fish and Wildlife:

- Designate the Upper West Arm and Upper Crab Creek Arm "Habitat Management Areas."
- Seasonally restrict watercraft to low speed/minimum wake operation from March 15 through June 30 to enhance wildlife nesting and breeding success for grebes, waterfowl, and other shorebirds.
- Seasonally prohibit dispersed camping from March 15 through June 30 to enhance wildlife nesting and breeding success. During this seasonal closure period, HMA dispersed camping opportunities would be available at specific sites designated and posted as "open" (see Figures 2-4.1,2-4.2 and 2-4.3 for site locations).
- Maintain and enhance the diking system located in the North Potholes Reserve,
 Upper Crab Creek, and Upper West Arm management areas to increase the
 number and extent of "carp-free" waters suitable for special status species (e.g.,
 leopard frogs), waterfowl, and other aquatic wildlife (e.g., grebes, terns, and
 herons).
- Manage these diked, "carp-free" waters either for aquatic wildlife (i.e., waterfowl) and/or as a separate fishery from the main reservoir. Those waters managed for fish would target warm water species such as bass and bluegill.
- Allow the limited use of rotenone in "carp-free" management waters. However, with the recent listing of the leopard frog as a state threatened species, the practicality and desirability of this management action must be carefully evaluated.
- Identify and protect bald eagle perching and foraging winter habitat. Although wintering bald eagles use the entire reservoir, the North Potholes Reserve, Peninsula South, and Upper Crab Creek Arm management areas are the most heavily used. In the event bald eagles pioneer into or breed in an area, stipulations would be incorporated into existing management and activity plans to ensure human disturbance is kept to a minimum. Appropriate site protective dates and/or buffer zones would be established and implemented near nesting sites.

- Post signs to seasonally close specific areas, campsites or islands during critical wildlife breeding and nesting periods. Closure periods to protect breeding sites would generally apply from February 1 to June 30 for nesting species of concern: Canada geese, ducks, and colonial nesting birds (e.g., gulls, terns, herons, egrets, and grebes).
- Enhance bald eagle wintering and roosting habitat by planting additional trees (i.e., cottonwoods and willows) where natural regeneration of suitable tree species is lacking or suitable trees are being lost or nonexistent. Measures (i.e., wrap tree trunks with wire netting) would be taken to protect key roosting sites from beaver activity.
- Seek funding to conduct a natural resource's GIS update at least every 10 years. The inventory could include an update of all the habitat, mammal and avian attributes previously mapped including such categories as waterfowl, colonial nesting birds, bald eagle perch trees and roosting sites, as well as threatened and endangered species occurrence and critical habitat locations.
- Seek funding to analyze the level of disturbance and impacts to nesting birds and other wildlife caused by motorboats, personal watercraft, and dispersed camping activities. Based on these findings, develop or modify strategies to control the time and place of these activities to reduce human-caused disturbances and protect sensitive habitat areas and vulnerable wildlife populations. These disturbance factors are particularly prevalent in the Dunes/Sand Islands management area.
- Control shoreline access and trails detrimental to wildlife habitat. Traditional
 fishing access would be maintained and perhaps formalized with constructed
 trails and/or boardwalks to prevent straying and subsequent habitat destruction.
- Seasonally restrict public access of any type in the south/central portion of North Potholes Reserve (see Figure 2-4.1) from March 15 through May 30. The purpose of this seasonal restriction is to minimize human interaction and disturbance during waterfowl and colonial nesting bird reproductive periods.
- Eliminate roads and minimize trails through wetlands, meadows, riparian, and other sensitive wildlife habitats.

• The use of pesticides and herbicides harmful to fish and/or wildlife would be prohibited in HMAs unless authorized by WDFW and Reclamation for wildlife habitat enhancement activities.

Water Quality:

- Review through the Oversight Panel the need for routine testing of fish flesh for concentrations of organic pesticides, metabolic by-products and heavy metals.
- Review through the Oversight Panel the need for an expanded reservoir water quality and sediment sampling program to determine concentrations of potential contaminants of concern (dieldrin, methoxychlor, etc.) and the effects of mosquito control spraying activities and chemicals on reservoir water quality and biota.
- Work with Grant County Mosquito Control District #1 to avoid or minimize chemical mosquito control methods in the Upper West Arm, Upper Crab Creek Arm, and North Potholes Reserve management areas. If mosquito control is deemed necessary biological control methods would be used whenever possible. In some circumstances, if biological controls fail or if human health is at risk, chemical controls would be allowed.

Visual Quality:

- Develop criteria for the appearance of structures and natural landscape preservation. These criteria would be applied in the planning, design, land use agreements and construction of all new facilities and structures, and in the maintenance or modification of all existing facilities and structures.
- Increase the promotion of "pack-in/pack-out" waste management practices in all
 visitor brochures, signs, educational materials, etc. developed for the Potholes
 area.
- Remove illegal trash dumps located in the study area. Work with user and civic groups (i.e., hunting and fishing clubs, ORV clubs, scouting clubs, etc.) to accomplish cleanup activities.

<u>Cultural Resources</u>: In addition to the actions described under Alternative A, the Reclamation and/or the State would:

- Seek funds for programmatic site management, test excavation of sites being damaged by on-going land use or operations, and stabilization or other management actions for affected sites that are eligible for the National Register.
- Work with Native Americans with interests at Potholes Reservoir to develop and display appropriate interpretive information on Native American use of the area and the need to preserve and protect cultural resources.
- If cultural resources are found on Reclamation lands "open" to ORV use that are
 eligible for the National Register, the Grant County ORV Area boundary would
 be adjusted to protect identified cultural resources and/or sites. Similarly, the
 land use agreement which authorizes the county to operate and maintain an ORV
 Area on The Reclamation lands managed by the WDFW would be amended to
 exclude culturally sensitive areas from the agreement and subsequent ORV
 activity.

<u>Recreation</u>: The Preferred Alternative provides for limited recreation development and the maintenance of existing recreation facilities and opportunities to a standard that protects the public and public investment while achieving resource protection objectives. Future developed recreation areas would be limited to Potholes State Park and O'Sullivan Site - North where a higher level of site and facility development would be provided by the SPRC.

Dispersed camping would continue to typify public recreation on lands administered by the WDFW. However, the direct and indirect environmental effects often associated with dispersed use (i.e., soil erosion and compaction, littering, improper human waste disposal, vegetative damage, wildlife disturbances, and indiscriminate motorized travel in adjacent areas) would be controlled by directing use to specific areas or sites designated "open" for dispersed use. These areas were selected due to their suitability for public use with minimal resource conflict or environmental effect.

The primary recreation features and facilities included in the Preferred Alternative are summarized on Figures 2-4.1, 2-4.2 and 2-4.3 and include:

Recreation Sites and Improvements:

Discourage/Control Use Areas

Post signs on specific islands (see "Fish and Wildlife above") or sites identified
by the WDFW as wildlife sensitive to seasonally discourage or control human
use.

Dispersed Camping Areas

 Control dispersed camping by limiting and directing use to "designated" areas or sites.

Designate the following management areas as "open" for dispersed camping:

- Peninsula North
- Peninsula South
- Lower Crab Creek Arm (boat-in or non-motorized land access required)
- Lower West Arm
- Dunes/Sand Islands (Note: At the discretion of the WDFW, specific islands may be seasonally closed with signs to minimize human disturbance to nesting birds, wildlife, and/or improve vegetative restoration efforts).

Designate the following HMAs as "seasonally open" for dispersed camping. During the seasonal closure period, dispersed camping opportunities would be available at specific sites designated and signed as "open" (see Figures 2-4.1, 2-4.2 and 2-4.3 for site locations). The seasonal closure would extend from March 15 through June 30 to enhance wildlife reproductive success.

- Upper Crab Creek Arm
- Upper West Arm

Designate the following management areas as "closed" to dispersed camping and limit dispersed camping opportunities within these areas to specific sites designated and signed as "open" (see Figures 2-4.1, 2-4.2 and 2-4.3 for site locations).

- North Potholes Reserve
- O'Sullivan Site South
- East Lind Coulee Arm
- West Lind Coulee Arm
- Developed Corridor

Designate the following management areas as "closed" to dispersed camping.

- O'Sullivan Site North
- Eastern Dunes
- Eastern Bluffs

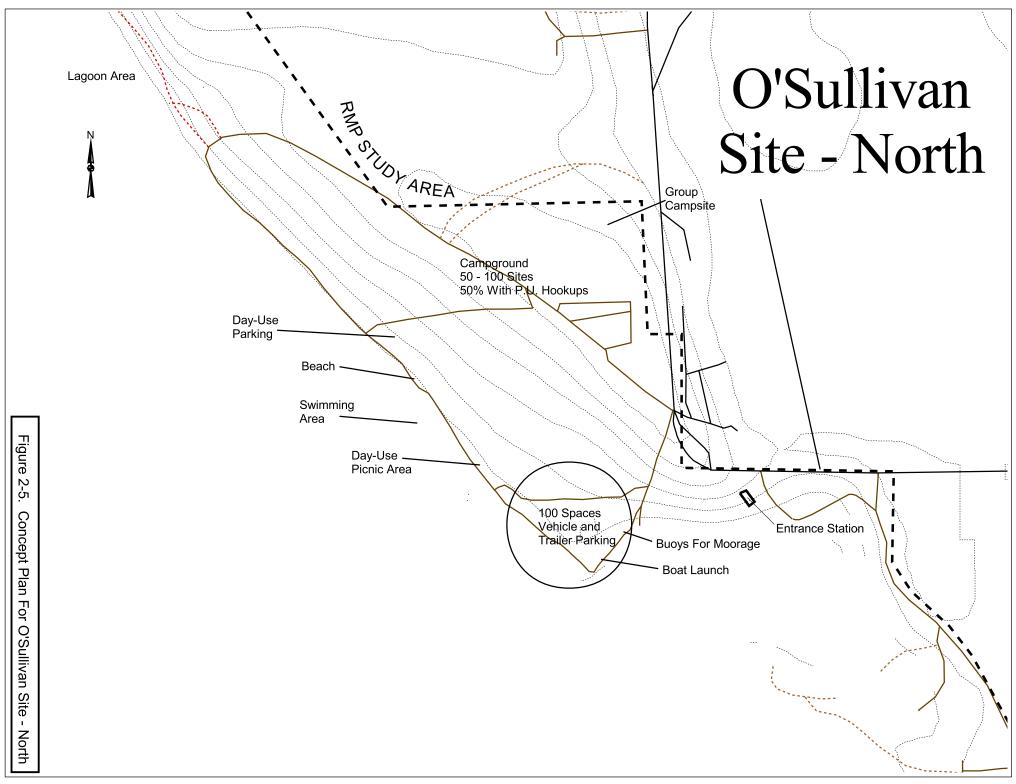
- Annually monitor the impacts associated with dispersed camping and recreational use. Establish baseline data and photo points to determine recreational impacts on soil, water quality, and vegetative and habitat resources. If "Limits of Acceptable Change" (LAC) monitoring reveals that impact/action thresholds have been exceeded, the WDFW and Reclamation would explore and prescribe alternative management actions for resolving the problems and revising the management direction. Opportunities for public review and comment would be provided prior to adopting and implementing any management changes affecting public use.
- Provide centrally located toilets (permanent or seasonal) to meet human waste disposal needs in high use areas (see Figures 2-4.1, 2-4.2 and 2-4.3 for site locations).
- Adopt and enforce a reservoir-wide 15-day stay limit for dispersed camping, unless posted otherwise.

Primitive Camping Areas

No primitive camping areas would be designated or developed.

Developed Recreation Areas:

- Provide a developed recreation area at O'Sullivan Site North as a unit of Potholes State Park (see Figure 2-4.1). Phased SPRC facilities and amenities for the site are shown on Figure 2-5, "O'Sullivan Site - North Conceptual Plan," and include:
 - boat launch, a 2-lane concrete boat ramp with courtesy docks
 - 100 space vehicles and trailer parking
 - restrooms
 - buoys for boat moorage
 - fish cleaning station, day use beach, and swimming area
 - campground (50-100 campsites, approximately 50% to include RV utility hookups)
 - group campground
 - day use picnic area (includes parking and restroom facility)
 - non-motorized trail system including ADA accessible fishing tumouts
 - access road upgrades
 - centralized trash receptacles and collection



- sewage treatment lagoons
- entrance station
- park residence and maintenance shop
- Provide for the construction of additional campsites and associated facilities within Potholes State Park. As described under the No Action alternative, Figure 2-3 illustrates the location and conceptual plan envisioned.

Other Recreation-Related Actions: Alternative B includes the following related actions.

- Develop additional interpretive trails and overview sites to expand "Watchable Wildlife" opportunities (see "Visitor Information/Interpretation" below for the specific features proposed).
- Provide courtesy docks at the Glen Williams Boat Launch.
- Surface the informal (cartop) boat launch at Blythe.
- Assess the feasibility of modifying and reconstructing the main boat launch at Blythe to improve low water access.
- Provide for the periodic dredging and removal of sediments deposited at the base of public boat launches.
- Provide signs directing visitors to all developed recreation areas and "designated" dispersed camping areas and sites at key road intersections; illustrate primary access routes on public information maps and in visitor brochures.
- Install "No Parking/No Camping" signs in immediate vicinity of the Powerline Boat Launch to improve vehicle and trailer maneuverability and traffic flows. Currently, dispersed parking and/or camping in close proximity to the boat ramp hampers boat ramp operations.
- Install a permanent vault toilet at the Powerline Boat Launch.
- Designate and keep the eastern portion (about one mile) of Powerline Road "open seasonally" to motor vehicle travel/ORV use.

• Until O'Sullivan Site - North is formally developed by the SPRC as a unit of Potholes State Park (see "Developed Recreation Areas" above for specific details), the O'Sullivan Beach and Perch Point area would be managed for day use recreation only (i.e., fishing, hiking, picnicking, wildlife observation, etc.). A fenced parking area with walk-in access portals would be provided off Perch Point Road, and human sanitation needs would be met via portable toilets on a seasonal basis. Trash would be managed under a "pack-in/pack-out" policy or with centrally located trash receptacles at the discretion of the SPRC. During this interim period, dispersed camping opportunities would remain available at O'Sullivan Site - South (see Figure 2-4.2) under WDFW management.

Land Use and Administration:

• Modify the land use agreement between the WDFW and Grant County to operate and maintain an ORV Area to include only those Reclamation lands within the Eastern Dunes management area, the southern portion of the Lower Crab Creek Arm and the south half of T18N, R28E, S10.

Off-Road Vehicle Management:

- Limit ORV use within the RMP study area to the Eastern Dunes and the southern portion of the Lower Crab Creek Arm management areas.
- Modify the Grant County ORV Area boundary to include the Eastern Dunes management area the southern portion of the Lower Crab Creek Arm, 320 acres of Reclamation land outside the RMP study area (T18N, R28E, S10, S1/2), and Grant County ORV Area lands. The "Green Zone" land area "open year-round" to ORV riding would continue to encompass about 1,895 acres (see Figures 2-4.1, and 2-4.3).
- Close 919-acres of the Lower Crab Creek Arm management area ("Yellow Zone") to motor vehicle travel and ORV use year-round. Maintain as seasonally open for ORV riding from July 1 to October 1 the remaining 540 acres. The 540 acre area would be fenced and posted. Motor vehicle access and travel would be allowed for maintenance, administrative, or emergency purposes.
- Designate and keep the eastern portion (about 1 mile) of Powerline Road "seasonally open" to motor vehicle travel/ORV use unless future closure or other control measures are needed to achieve resource management objectives. The western portion (about 0.7 miles) of Powerline Road would be permanently closed to motorized travel/ORV use.

- Retain the existing year-round ORV closure in the Upper Crab Creek Arm management area.
- Eliminate the northern portion of the "Yellow Zone" and all of the "Red" zone delineations and designations as both would be permanently closed to ORV travel (see Figure 2-2).
- Continue the ORV and motor vehicle closure within the Eastern Bluffs management area. Road gates or other physical barriers and signs would be installed across the two access roads that enter the site from the east (see Figure 2-4.1). No permanent ORV access route leading from the Eastern Dunes management area to the O'Sullivan Site would be constructed.
- Cooperate with the Grant County Sheriff's Office to patrol and monitor ORV use and environmental resource conditions and trends within the Grant County ORV Area.
- Restore and revegetate severely damaged areas closed to ORV use. Locate and develop an interpretive trail to illustrate habitat restoration in the Lower Crab Creek Arm management area.
- Fence the east side of Sand Dunes Road between South Outlet and Powerline Road to prevent indiscriminate ORV entry. Provide four hard-surfaced roadside turnouts along the east side of the Sand Dunes Road for vehicle and ORV parking. At each turnout, a non-motorized access route would lead to a designated dispersed camping area adjacent to Moses Lake (see Figures 2-4.1 and 2-4.3). Motorized use of these access routes would be limited to administrative and emergency use only.
- Update and post additional signs along Sand Dunes Road to improve public awareness of ORV Area boundaries, regulations, and riding and camping opportunities.
- Update existing Grant County ORV Area signs and maps to clearly illustrate ORV Area boundaries, regulations, and riding opportunities.

Grazing Management

- Limit the grazing permit program at Potholes Reservoir to the existing 7,400-acre authorization under grazing permit TP-01 or when livestock grazing is used on a rotational bases to meet management objectives (see Figure 2-4.1).
- Keep livestock forage utilization on the 6,700-acre pasture within the North Potholes Reserve and Peninsula North management areas limited to no more than 600 AUMs from November 1 until March 15.
- Keep livestock forage utilization on the 700-acre pasture within the Upper West Arm management area limited to no more than 600 AUMs from March 15 to April 15. This portion of grazing permit TP-01 is fenced and grazed as part of a two-pasture grazing rotation.
- Adjust livestock grazing management as needed to maintain or enhance habitat
 for special status plant and animal species. This may include development of
 livestock enclosures, or restricted use pastures where grazing systems cannot
 otherwise be adjusted to accommodate the habitat requirements of a special status
 species.
- Modify AUM allocations, season-of-use authorizations, and other Grazing Plan stipulations included in renewed permits to maintain or improve native rangeland species and attain composition, density, foliar cover, and vigor appropriate to site potential and wildlife management objectives.
- Modify renewed grazing permits to stipulate a minimum of two growing seasons
 rest from livestock grazing following fires. Following this two-year rest period,
 evaluate range health and suitability for livestock use prior to allowing forage
 utilization.
- Monitor and evaluate twice annually the effect of the grazing permit on native rangeland species, plant composition, density, foliar cover, and vigor appropriate to site potential and wildlife management objectives. The evaluator would observe growing season conditions, measure grazing use, record range condition, and determine if objectives are being met. Modify Grazing Plan season-of-use and AUM allocations accordingly or when it would benefit management objectives.

Visitor Information and Interpretation

- Provide managed access, turnouts, signs, and/or interpretive trails and displays to enhance "Watchable Wildlife" viewing opportunities. In addition to the features outlined under Alternative A, the Preferred Alternative would provide the following (see Figures 2-4.1, 2-4.2 and 2.4.3 for site locations):
 - West Lake/North Outlet: Develop a half-mile loop trail beginning at the North Outlet parking lot. The trail would traverse through shrub-steppe, wetland, and riparian habitats. Wetland crossings would likely involve boardwalk construction.

Interpretive materials and signs would be used to describe habitat relationships for waterfowl, shorebirds, waders, songbirds and fur-bearers. The site would be convenient to Moses Lake residents and provide valuable recreation and education opportunities for tourists, local citizens, and school districts.

- North Potholes Reserve: Design and develop a system of hiking trails and blinds north of Job Corps Dike to view and interpret the area's colonial nesting bird rookery for great blue herons, black-crowned night herons, great egrets, and double-crested cormorants. The project would also provide excellent opportunities to view shorebirds, raptors, waterfowl, songbirds, terns, beaver and mule deer.
- Develop a public education and interpretive program to increase the public's awareness of Potholes Reservoir natural resources, management problems and concerns, and the area's high desert environment and fragility. The interpretive program envisioned would focus on the areas' vegetation, wildlife, sand dune, and historian cultural features.
- Install signs at all developed recreation areas, boat launches, and other high public use areas. Use signs, maps, and brochures to inform visitors of recreation opportunities; boating hazards; boating, camping, and motorized and ORV travel regulations and restrictions; road and area closures; etc. in the reservoir area.
- Post or modify existing signs to inform the public of relevant Grant County ordinances and regulations. Post "Pack-In/Pack-Out" signs and posters on all signs and bulletin boards used for public information purposes.

- Post management regulations at "D.5 SE Road" entrance.
- Provide signs to all developed and dispersed recreation areas at key road intersections, and use informational materials and maps to illustrate these primary public access routes.
- Develop an overall visitor guide/map for the Potholes Reservoir area. The guide
 would be a useful tool to promote and direct visitors to designated dispersed
 camping areas, developed recreation area facilities and services, points of
 interest, etc. Provide information on motorized travel restrictions and
 regulations; and guidance on the proper disposal of human wastes, pack-in/packout, fire use, and camping etiquette.
- Pursue the cooperative development of an "Environmental Education Center" within or near the Developed Corridor.
- Install additional "ORV Area" signs to clearly direct off-road vehicle users to the authorized Grant County ORV Area. Modify the existing ORV signs posted in and near the Area to accurately reflect ORV Area boundaries and the land area "open" to ORV riding.

Public Health and Safety/Environmental Protection

In addition to, or in place of, the actions outlined under Alternative A, the following management actions would be implemented:

No Motorized Access:

- Close the western portion (about 0.7 miles) of Powerline Road and 919 acres of the "Yellow Zone" to motor vehicle travel/ORV use except for maintenance, administrative and emergency purposes (see Figures 2-4.1 and 2-4.3). Under the Preferred Alternative, approximately 18.4 miles of primitive road would be permanently closed to motorized travel.
- Install road gates, fencing, signs, and/or buoys as needed to enforce seasonal and permanent closures.

Managed/Limited Motorized Access:

- Maintain 41.9 miles of the primitive/gravel road network open year-round or seasonally to discourage random motor vehicle travel.
- Seasonally restrict motorized water craft to low-speed/minimum wake operation in the Upper West Arm and Upper Crab Creek Arm HMAs from March 15 through June 30. This action is designed to enhance wildlife nesting and breeding success for grebes, waterfowl, and other shorebirds.
- Continue the 1.5-mile seasonal road closure from October 1- January 1 in the East Lind Coulee Arm.

Resource Protection and Enhancement:

- Provide permanent or portable toilets in high use dispersed camping areas where human wastes pose a public health or environmental hazard (see Figure 2-4.1, 2-4.2 and 2-4.3 for site locations).
- Increase the public's awareness of WDFW's "pack-in/pack-out" policy and other waste management strategies. Post "pack-in/pack-out" signs at all high public use areas, dispersed camping areas, boat launches, etc.
- Seek funding and partnerships for additional staff, equipment, and/or contract services to meet reservoir-wide waste management needs toilets and trash cleanup.
- Construct trails and boardwalks to control public access and foot traffic through wetland and riparian habitats in high use recreation areas (i.e., within the Developed Corridor).
- Control dispersed camping in environmentally unsuitable or sensitive areas through appropriate access restrictions, seasonal use restrictions, or closure. Manage this use according to the "Recreation" actions described above.
- Seasonally restrict public access of any type in the south/central portion of North Potholes Reserve (see Figure 2-4.1) from March 15 through May 30. The purpose of this seasonal restriction is to minimize human interaction and disturbance during waterfowl and colonial nesting bird reproductive periods.

- Seasonally restrict watercraft to low speed/minimum wake operation and prohibit dispersed camping (except in designated areas or sites) in HMAs from March 15 through June 30 to enhance wildlife nesting and breeding success.
- Monitor resource effects from motorized access, dispersed recreation and camping, and public use on an annual basis. If the LAC process and monitoring reveals that impacts and action thresholds have been exceeded, the WDFW, SPRC, and Reclamation would explore and prescribe alternative management actions for resolving the problems and revising the management direction.

On the basis of the information gathered, the management agencies would amend or rescind existing management strategies or actions to balance public recreation and resource protection policies, goals and objectives. Opportunities for public review and comment would be provided prior to adopting and implementing any management changes affecting public use.

- Manage/limit dispersed camping and/or public access with gates, fencing, signs and/or buoys as needed to seasonally or permanently close roads and/or areas to motorized travel where resource protection and enhancement needs have been identified.
- Perform minor road improvements (i.e., grading and/or the placement of gravel) as needed to improve vehicular access and/or reduce soil erosion and public safety concerns where continued primitive road access is desirable.
- Prohibit the discharge of firearms in areas of wildlife species conflicts or for reasons of public safety in the Lind Coulee Arm, watchable wildlife areas, and other high use public recreation areas except during the primary hunting season.

2.5.3 Alternative C - Preservation/Enhancement

Alternative C, the preservation and enhancement alternative, seeks to preserve and enhance the area's natural, recreational and cultural resource attributes by focusing and restricting recreation and other land use activities to minimize adverse resource effects. In concert with this management theme, this alternative would designate four Habitat Management Areas, minimize future recreation development, and close all Reclamation lands within the RMP study area boundary to ORV riding.

This alternative would specifically exclude state park development at O'Sullivan Site - North, water milfoil control, and a continued grazing permit program. In the absence of developing O'Sullivan Site - North as an addition to Potholes State Park, the O'Sullivan Site (North and South) would be transferred from the SPRC to WDFW and managed as a day-use and dispersed camping area.

Figures 2-6.1, 2-6.2 and 2-6.3 highlight the specific management actions and plan features included in Alternative C. In order to minimize duplication and clearly define the differences between alternatives, the following discussion focuses on which actions and elements either differ from the Preferred Alternative or were eliminated because of the alternative's resource preservation and enhancement emphasis. Similar to B, Alternative C would facilitate greater coordination among the many agency programs, plans, and actions as they apply to Reclamation lands at Potholes Reservoir.

<u>Natural Resources</u>: This alternative includes all the actions and plan elements outlined under the Preferred Alternative. The elements listed below are either in addition to or differ in degree, size, or intensity from the Preferred Alternative.

Vegetation and Weed Control:

- Prohibit the use of spot herbicide applications to control Eurasian watermilfoil.
- Cancel grazing permit TP-01.
- Close and revegetate 3.5 miles of the primitive road system to enhance shrubsteppe habitats in the Upper Crab Creek Arm and East and West Lind Coulee Arm management areas (Figures 2-6.1, 2-6.2 and 2-6.3).
- Revegetate 4.3 miles of the primitive road system in the North Potholes Reserve,
 Upper West Arm, and West Lind Coulee Arm management areas previously
 closed to motorized use by the WDFW. Portions of the East Lind Coulee Arm
 road network already closed to motorized travel have naturally been recolonized
 with native species and requires no additional management attention.

Fish and Wildlife:

• Designate the Upper West Arm, Upper Crab Creek Arm, Peninsula South, and East Lind Coulee Arm as HMAs.

- Prohibit motorized watercraft in the Upper West Arm and East Lind Coulee Arm.
- Restrict watercraft to low speed/minimum wake operation in the Upper Crab Creek Arm year-round.
- Limit dispersed camping opportunities to specific sites designated and posted as "open" (see Figures 2-6.1, 2-6.2 and 2-6.3 for site locations).
- Continue existing road and motor vehicle closures within the Upper West Arm and limit motor vehicle travel in the Upper Crab Creek Arm, East Lind Coulee Arm, and Peninsula South to existing graveled roads.
- Seasonally restrict watercraft to low-speed/minimum wake operation in the Dunes/Sand Islands management area from April 15 through June 30 to enhance wildlife nesting and breeding success for grebes and colonial nesting birds.

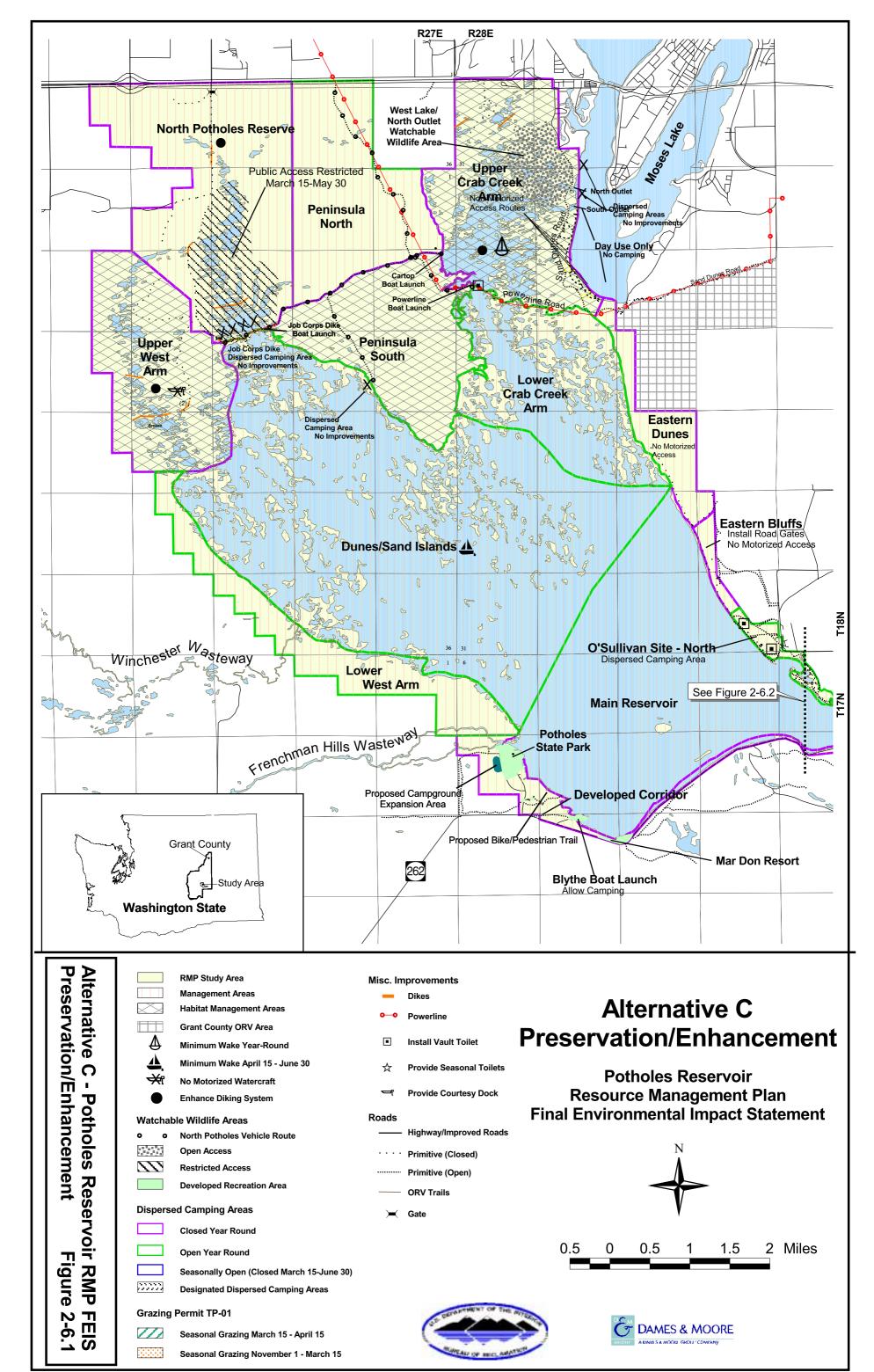
Water Quality:

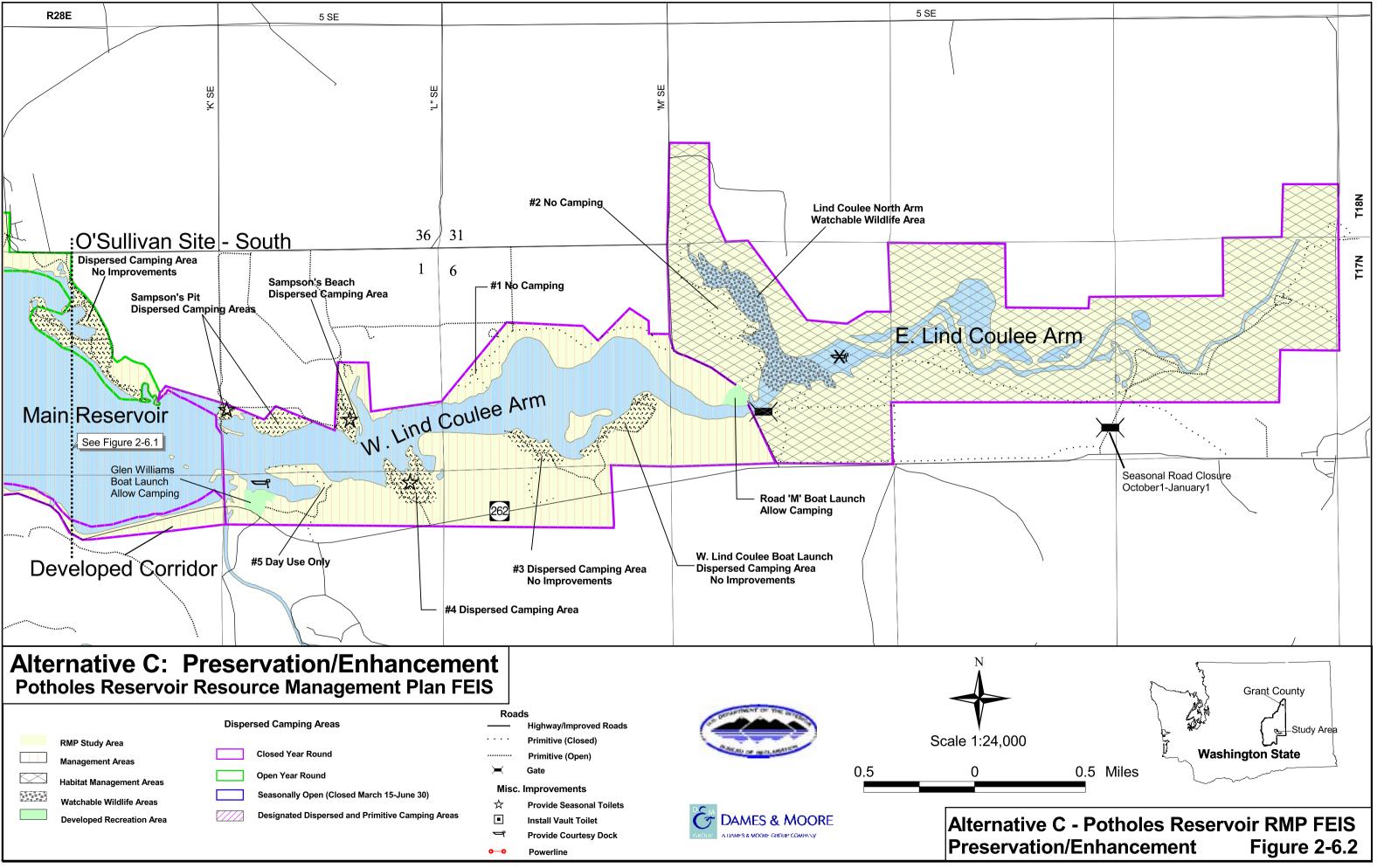
• Work with Grant County Mosquito Control District #1 to avoid or minimize mosquito spraying activities in the Upper West Arm, Upper Crab Creek Arm, Peninsula South, East Lind Coulee Arm, and North Potholes Reservoir management areas. If mosquito control is determined necessary, BTI or similar biological control methods would be used.

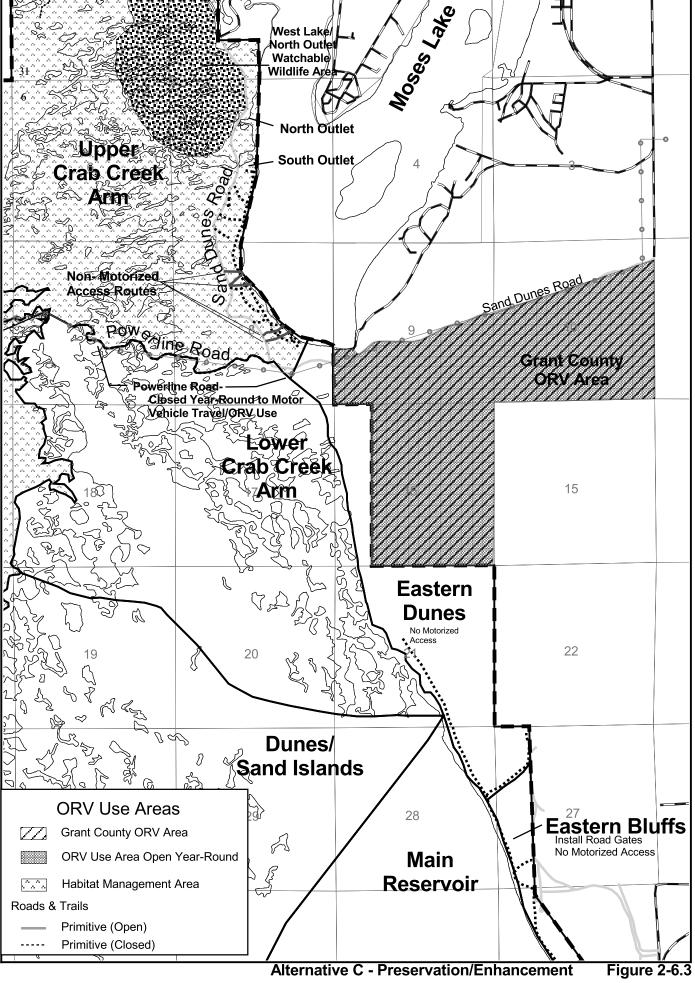
<u>Cultural Resources</u>: Includes all the actions and plan elements outlined under Alternative B. However, adjustments to the ORV Area boundary and associated land use agreement to exclude culturally sensitive areas from ORV use would not be required. Under Alternative C, all Reclamation lands within the RMP study area boundary would be closed to ORV use.

<u>Recreation</u>: With an emphasis on the maintenance of existing recreation facilities and the protection of natural resources, few, if any, new recreation amenities or developments would be constructed. Based on the recreation assessment, facilities and use would be focused within existing developed recreation areas and designated dispersed camping areas. The dispersed camping areas selected were identified in the assessment as the most popular and environmentally suited for this activity.

Overall, future recreation developments would be limited to meeting public facility needs within Potholes State Park and basic environmental protection, public health and safety needs in popular dispersed use areas. Unlike Alternatives A, B or D, no developed recreation area would be







constructed at O'Sullivan Site - North as a unit of Potholes State Park, and dispersed camping and motorized access would be more restricted compared to the other alternatives. The primary recreation features and actions included in this alternative are summarized on Figures 2-6.1, 2-6.2 and 2-6.3 and include the following:

Recreation Sites and Improvements:

Discourage/Control Use Areas would be the same as Alternative B.

Dispersed Camping Areas

• Control dispersed camping by limiting and directing use to "designated" areas or sites.

Designate the following management areas as "open" for dispersed camping:

- Peninsula North
- Lower Crab Creek Arm (boat-in or non-motorized land access required)
- O'Sullivan Site (North and South)
- Lower West Arm
- Dunes/Sand Islands (Note: At the discretion of the WDFW, specific islands may be seasonally closed with signs to minimize human disturbance to nesting birds, wildlife, and/or improve vegetative restoration efforts).

Designate the following management areas as "closed" to dispersed camping and limit dispersed camping opportunities within these areas to specific sites designated and signed as "open" (see Figures 2-6.1, 2-6.2 and 2-6.3 for specific site locations).

- North Potholes Reserve
- Upper Crab Creek Arm
- Peninsula South
- West Lind Coulee Arm
- Developed Corridor

Designate the following management areas as "closed" to dispersed camping.

- Upper West Arm
- Eastern Dunes

- Eastern Bluffs
- East Lind Coulee Arm
- Adopt and enforce a reservoir-wide 10-day stay limit for dispersed camping, unless posted otherwise.

Primitive Camping Areas:

• No primitive camping areas would be designated or developed.

Developed Recreation Areas:

• No developed recreation area would be constructed at the O'Sullivan Site. Instead, the area (North and South) would be transferred to the WDFW and managed for dispersed camping and day use. Two permanent vault toilets would be centrally located in the O'Sullivan Beach area.

Other Recreation-Related Actions:

Under Alternative C, two recreation features included in the Preferred Alternative were eliminated: (1) surface the informal (cartop) boat launch at Blythe, and (2) determine the feasibility of modifying and reconstructing the main boat launch at Blythe to provide for low water access. Other differences include:

• Limit the periodic dredging and removal of sediments deposited at the base of public boat launches to the Developed Corridor.

Land Use and Administration:

- Modify the existing land use agreement between the WDFW and Grant County to operate and maintain an ORV Area on Reclamation land to include only the 320-acre tract located outside the study area in the south half of Section 10, T18N, R28E (see Figure 2-6.3). Under this alternative, ORV use and travel would be prohibited on all Reclamation lands located within the RMP study area boundary.
- Transfer "lead agency" recreation management responsibilities at the O'Sullivan Site (North and South) from SPRC to WDFW. In the absence of developing the site as a unit of Potholes State Park, the SPRC would no longer have an interest in retaining and managing the area for recreation.

• Phase-out the grazing permit program administered by the WDFW. The existing permit program at Potholes Reservoir would be phased-out by allowing the existing permit (TP-01) to expire without renewal (see Figure 2-6.1 for permit location).

Off-Road Vehicle Management: Under Alternative C, ORV riding opportunities would be discontinued on Reclamation lands within the study area. The management actions which differ from those outlined under the Preferred Alternative include:

- Designate as "closed" to ORV use all areas, roads and trails located on Reclamation land within the RMP study area boundary.
- Modify the Grant County ORV Area boundary to include 320 acres of Reclamation land located outside the study area in the south half of Section 10, T18N, R28E and Grant County ORV Area lands. The "Green Zone" land area "open year-round" to ORV riding would encompass about 1,227 acres (see Figures 2-6.1 and 2-6.3).
- Fence the ORV Area boundary to prevent indiscriminate ORV entry from the Grant County ORV Area onto Reclamation lands within the RMP study area.
- Eliminate the existing "Yellow," "Red" and "Green" zone delineations and designations on Reclamation lands within the RMP study area since these lands would be permanently closed to motor vehicle travel and ORV riding. Motor vehicle access and travel would be allowed for maintenance, administrative and emergency purposes.
- Permanently close the 1.7 mile Powerline Road to motor vehicle travel/ORV use.
 Motor vehicle access would be allowed for maintenance, administrative and emergency purposes.
- Fence and provide turnouts along the east side of Sand Dunes Road between South Outlet and Powerline Road. At each turnout, a non-motorized access route would provide public access for day use activities only (e.g., fishing, hiking, picnicking, sunbathing, wildlife observation) along the west shore of Moses Lake (see Figures 2-6.1 and 2-6.3). No dispersed camping areas would be provided since the area would be managed for day use only.

Grazing Management

- Phase-out WDFW's grazing permit program by allowing the existing permit (TP-01) to expire without renewal.
- Construct fences, where needed, to prevent trespass livestock entry onto Reclamation lands from adjacent lands.

Visitor Information and Interpretation:

Includes all the actions and plan elements outlined under Alternatives A and B except for the following "Watchable Wildlife" modification.

Lind Coulee North Arm: Provide a short (about ½-3/4 mile) interpretive trail with blinds and interpretive signs. The walk-in trail would begin at a fenced parking area just north of the Road "M" SE bridge. The trail would primarily utilize the area's existing primitive road system which would be permanently closed to motorized use and rehabilitated under this alternative. This area provides excellent opportunities to view migrant shorebirds and concentrations of waterfowl during late summer and early fall when mudflats become exposed.

Public Health and Safety/Environmental Protection:

In place of the actions outlined under Alternatives A and B, the following management actions would be implemented:

No Motorized Access - Under Alternative C, approximately 24.5 miles of primitive road would be closed to motor vehicle travel. Compared to Alternative A, the following additional closures would be made.

- Close and revegetate 3.5 miles of primitive road to motorized travel not needed for public or agency access (see Figures 2-6.1 and 2-6.2).
- Close 1.6 miles of primitive road in the south portion of the Eastern Dunes management area and the 1.7-mile Powerline Road to motor vehicle travel (see Figures 2-6.1 and 2-6.3).
- Prohibit motor vehicle travel in the Lower Crab Creek Arm, Eastern Dunes, Eastern Bluffs, Lower West Arm, Upper West Arm, and North Potholes Reserve management areas except for authorized administrative or emergency purposes.

 Prohibit motorized watercraft in the Upper West Arm and East Lind Coulee Arm HMAs year-round.

Managed/Limited Motorized Access

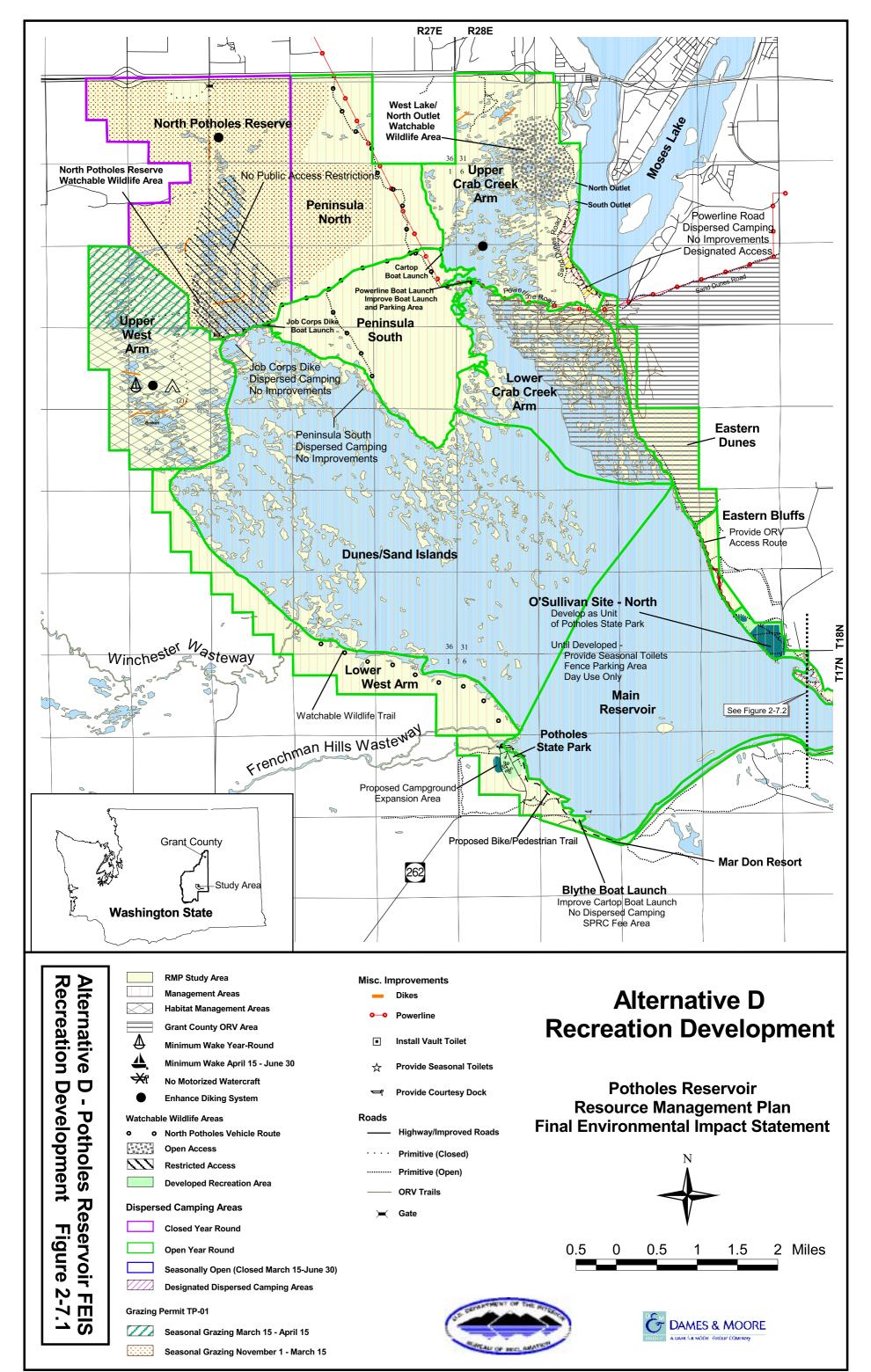
- Maintain 35.8 miles of the primitive/gravel road network open year-round or seasonally to discourage random off-road vehicle use.
- Restrict watercraft to low speed/minimum wake operation in the Upper Crab Creek Arm HMA year-round.
- Seasonally restrict watercraft to low-speed/minimum wake operation in the Dunes/Sand Islands management area from April 15 through June 30 to enhance wildlife nesting and breeding success for grebes and colonial nesting birds.
- Motorized road travel within the RMP study area would be limited to designated roads and parking areas only.

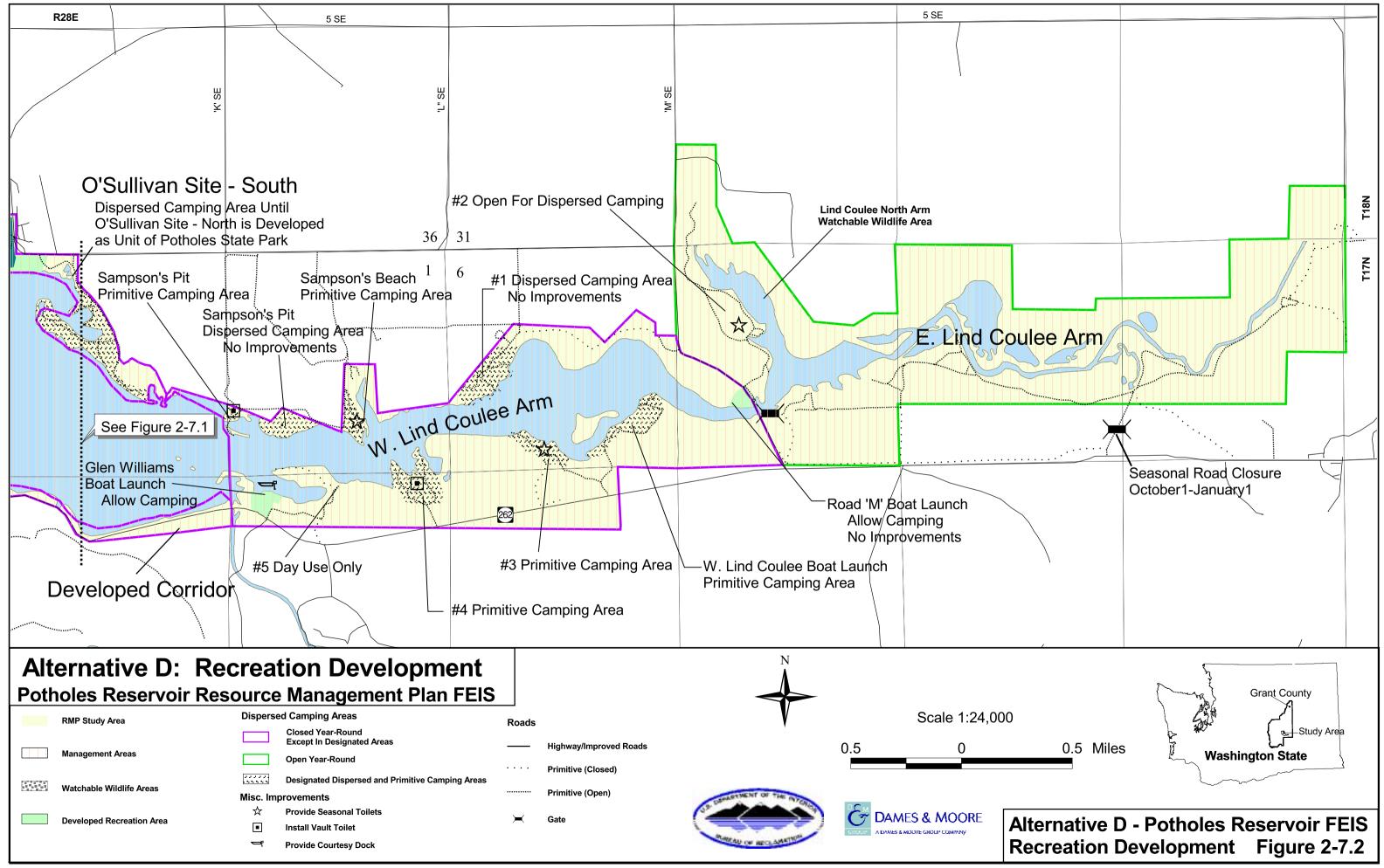
Resource Protection and Enhancement:

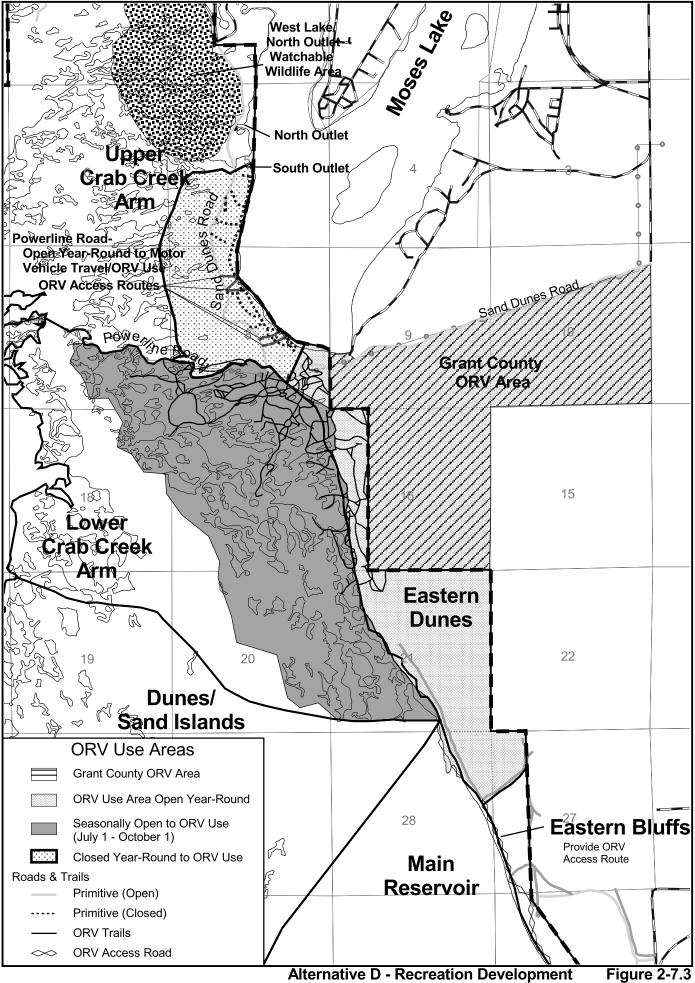
- Provide permanent or portable toilets in high use dispersed camping areas where human wastes pose a public health concern or environmental hazard (see Figures 2-6.1, 2-6.2 and 2-6.3 for site locations).
- Revegetate 7.8 miles of primitive road not needed for public or agency access.
- Prohibit the discharge of firearms reservoir-wide except from September 1 to February 1. Continue year-round prohibition on guns in North Potholes Reserve and Potholes State Park.

2.5.4 Alternative D - Recreation Development

Alternative D, the Recreation Development alternative, expands the recreation potential and range of developed recreation opportunities at Potholes Reservoir. Although dispersed, unstructured recreation activities would continue to typify public use outside Potholes State Park, new or added recreation facilities and amenities would be provided in the most popular, high use areas.







Consistent with a "recreation development" emphasis, Alternative D provides the highest level of recreation site and facility development and designates the largest area "open" for dispersed camping. Developed and primitive recreation facilities would be provided at specific sites determined environmentally suited for public use. However, similar to the other RMP alternatives, public use would be discouraged or controlled in areas with environmental sensitivities or specific resource constraints.

Under this alternative, recreation management responsibilities within the Developed Corridor would be transferred to the SPRC. Consistent with this transfer and existing SPRC policy, public hunting and dispersed camping would no longer be allowed in this area, and SPRC boat launching and overnight parking fees would be collected at the Blythe Boat Launch facility.

Most of the plan features and actions included in Alternative D (see Figures 2-7.1, 2-7.2 and 2-7.3) are the same as the Preferred Alternative. Therefore, the following discussion highlights what management actions are either different or added features compared to Alternative B. Similar to the other action alternatives, Alternative D would facilitate greater coordination among the many agency programs, plans, and actions as they apply to Reclamation lands at Potholes Reservoir.

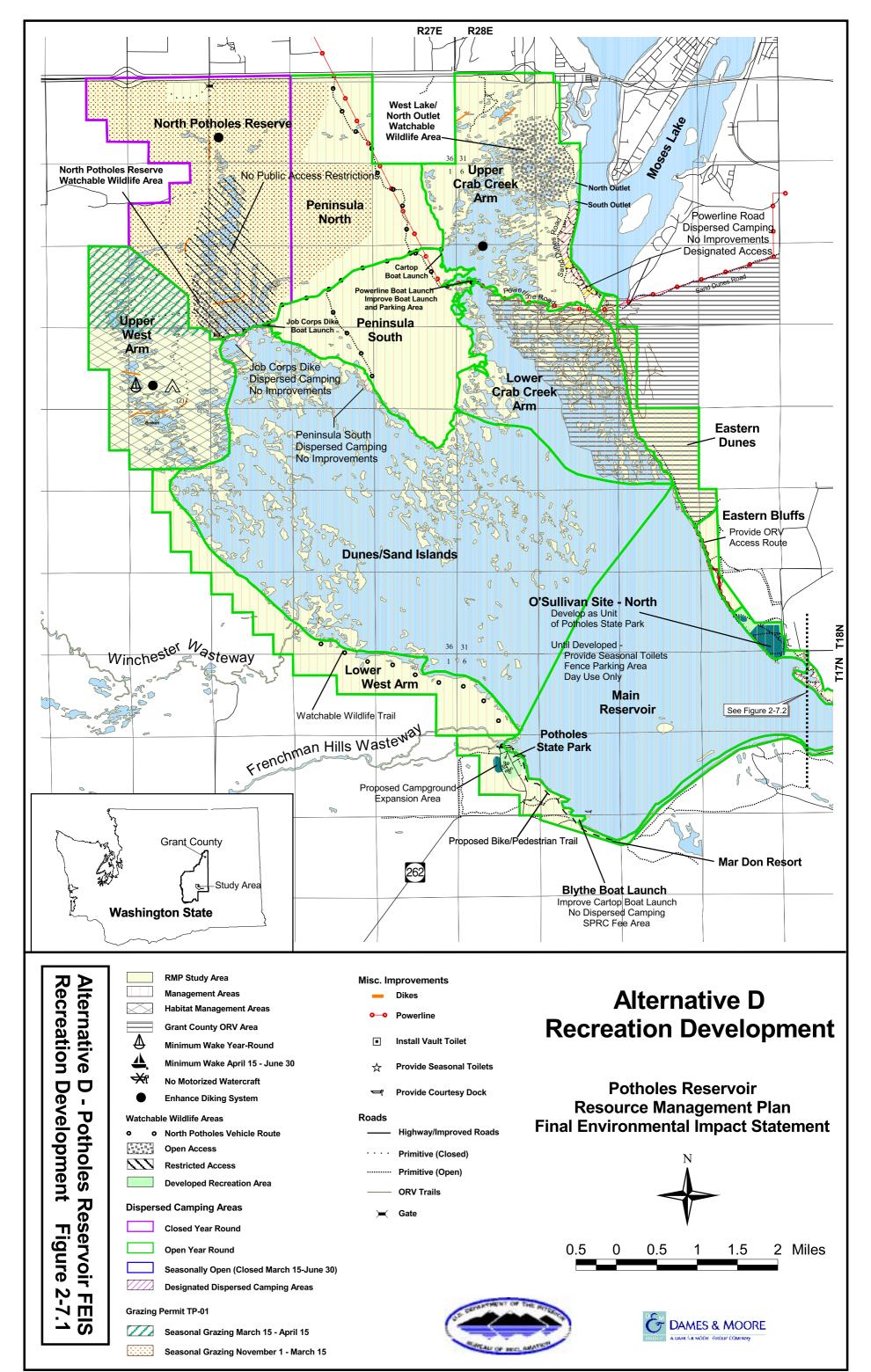
Natural Resources:

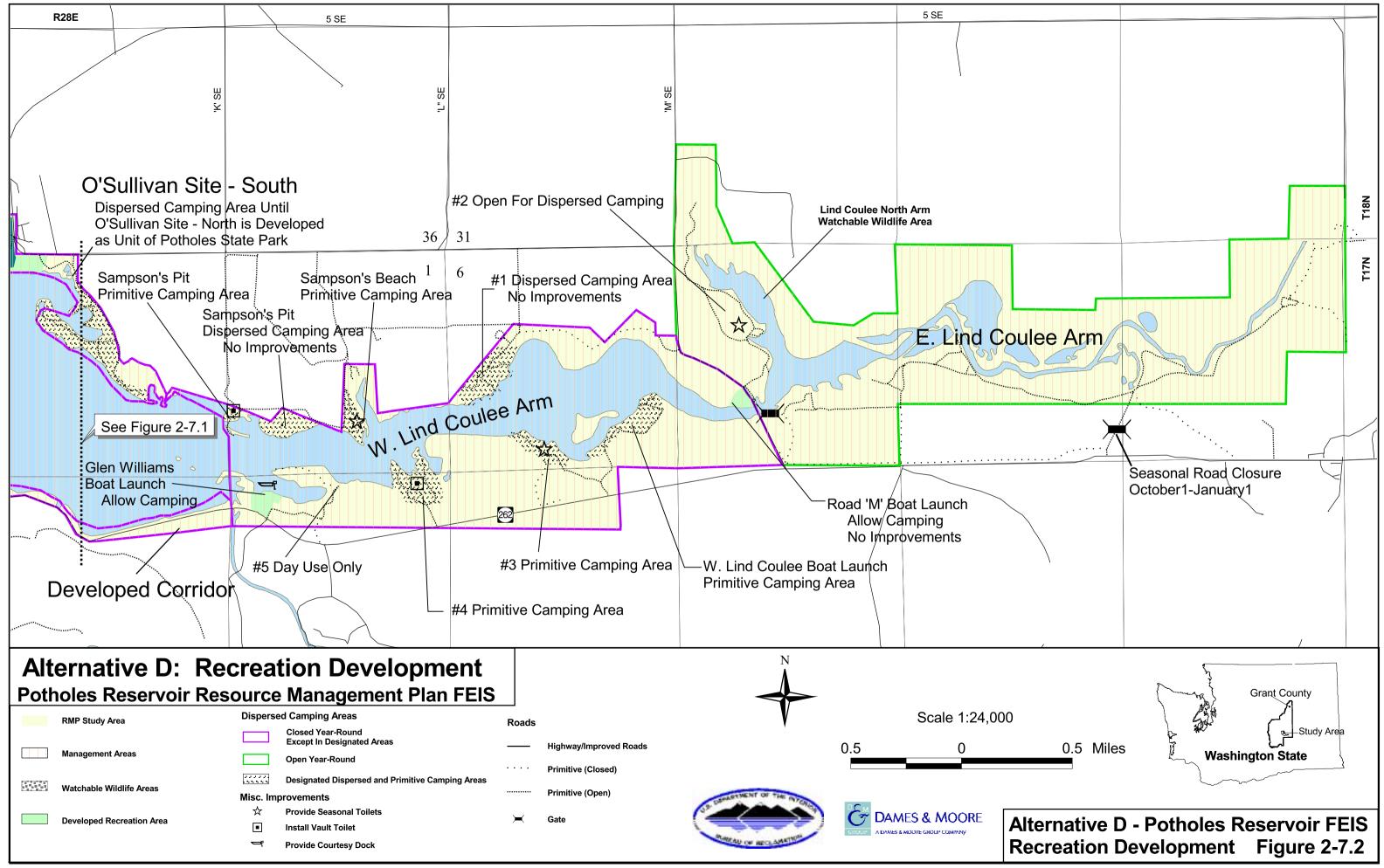
Vegetation and Weed Control:

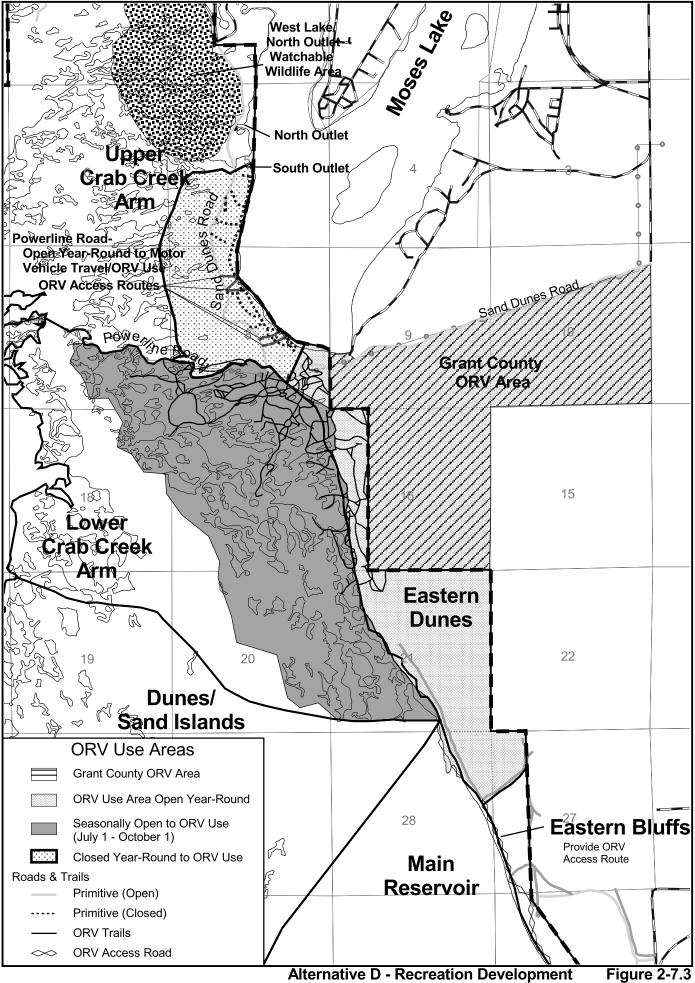
• Limit motor vehicle travel and ORV use within the 1,459-acre Lower Crab Creek Arm management area to designated roads and trails to protect wildlife habitat. Similar to the Preferred Alternative, severely damaged areas would be rehabilitated and an interpretive trail developed to illustrate habitat restoration efforts.

Fish and Wildlife:

- Designate the Upper West Arm as an HMA. The management actions associated with this HMA designation would be the same as detailed under the Preferred Alternative.
- No seasonal public access restrictions would be implemented in the south/central portion of North Potholes Reserve.







Water Quality:

 Work with Grant County Mosquito Control District # to avoid or minimize chemical mosquito control methods within the Upper West Arm management area. If mosquito control is determined necessary, BTI or similar biological control methods would be used.

<u>Cultural Resources:</u> In addition to the actions described under Alternative A, the Reclamation and/or State would:

- Work with Native Americans with interests at Potholes Reservoir to develop and display appropriate interpretive information on Native American use of the area.
- If cultural resources are found on Reclamation lands "open" to ORV use that are eligible for the National Register, the Grant County ORV Area boundary would be adjusted to protect identified cultural resources and/or sites.
- Conduct Class III surveys and prepare a Cultural Resource Management Plan (CRMP). The CRMP will outline specific actions and methods to protect cultural resources.
- Coordinate with Native Americans with interests at Potholes Reservoir to prepare the CRMP and manage cultural resources.

<u>Recreation</u>: Existing amenities would be maintained and coupled with the development of new recreation sites and facilities for the public's enjoyment. Additional developments and improvements outside Potholes State Park would be focused in popular use areas environmentally suited to accommodate existing and projected use.

The most popular dispersed camping areas would be designated and managed as "primitive camping areas." These areas would receive some minor sanitation and facility improvements to better accommodate and manage public use in concert with the RMP's wildlife and environmental protection and enhancement goals.

With the transfer of recreation management responsibilities within the Developed Corridor to the SPRC, the Blythe Boat Launch would become a State Park "fee area" for boat launching and overnight parking. Unlike Alternatives A, B and C, dispersed camping would no longer be allowed in the Blythe parking area or in any area located within the Developed Corridor. Public hunting would be prohibited within the Corridor in accordance with SPRC policy.

Recreation Sites and Improvements:

Dispersed Camping Areas:

• Control dispersed camping by limiting and directing use to "designated" areas or sites.

Designate the following management areas as "open" for dispersed camping:

- Peninsula North
- Peninsula South
- Upper Crab Creek Arm (Note: Camping along the west shore of Moses Lake east of Sand Dunes Road would be limited to designated primitive camping areas along the lake shoreline)
- Lower Crab Creek Arm
- Lower West Arm
- Dunes/Sand Islands (Note: At the discretion of the WDFW, specific islands may be seasonally closed with signs to minimize human disturbance to nesting birds, wildlife, and/or improve vegetative restoration efforts).
- Eastern Dunes
- Eastern Bluffs
- East Lind Coulee Arm

Designate the Upper West Arm HMA as "seasonally open" for dispersed camping. The seasonal closure would extend from March 15 through June 30 to enhance wildlife reproductive success.

Designate the following management areas as "closed" to dispersed camping and limit dispersed camping opportunities within these areas to specific sites designated and signed as "open" (see Figures 2-7.1, 2-7.2 and 2-7.3 for site locations).

- O'Sullivan Site South
- North Potholes Reserve
- West Lind Coulee Arm

Designate the following management areas as "closed" to dispersed camping.

- Developed Corridor
- O'Sullivan Site North

Primitive Camping Areas:

• Designate and manage 12 primitive camping areas (see Figures 2-7.1, 2-7.2 and 2-7.3 for specific site locations). Minor road improvements (i.e., grading and/or the placement of gravel), the installation of fire rings and grills to delineate individual campsites, and permanent or seasonal vault toilets would be provided. These minimum facility improvements would help control dispersed use and reduce the public health and environmental hazards associated with improper human waste disposal.

Other Recreation-Related Actions:

In addition to the features and actions included in the Preferred Alternative, Alternative D would provide the following:

- Develop additional interpretive trails and overview sites to expand "Watchable Wildlife" opportunities (see "Visitor Information/Interpretation" below for specific features).
- Improve the Powerline boat launch and parking area. The launch ramp and adjacent parking area would be upgraded to better serve boaters with trailers and boat launch traffic and circulation. During high use periods, the site's small size and nearby dispersed camping often interfere with boat launching activities. A permanent vault toilet would also be installed.
- Explore the feasibility of improving the Job Corps Dike boat launch. Upon further study, it may be preferable to improve vehicle and trailer parking and boat ramp usability by relocating the launch facility.
- Provide courtesy docks at the Blythe boat launch site.
- Allow non-motorized access and floating device use year-round within the North Potholes Reserve management area.
- Open 2.7 miles of primitive road to vehicular travel in the East Lind Coulee Arm.
 These primitive roads are presently closed to motorized travel and may require some improvement (e.g., blading to remove vegetation, grading and/or gravel placement) prior to reopening. This action would enhance public access and recreational opportunities in an area where road access currently is limited.

• Designate and keep the 1.7-mile Powerline Road "open year-round" to motor vehicle travel/ORV use to enhance public access and recreation opportunities in an area where road access currently is limited.

Land Use and Administration:

- Modify the land use agreement between the WDFW and Grant County to operate and maintain an ORV Area as detailed under Alternative A No Action.
- Transfer "lead agency" recreation management responsibilities within the Developed Corridor to the SPRC. Expanded SPRC operation and maintenance responsibilities would include the Blythe Boat Launch facility and the bicycle and pedestrian trail linking Potholes State Park to O'Sullivan Dam.

Off-Road Vehicle Management:

- ORV riding within the RMP study area would continue within the existing "Yellow" and "Green" zones located in the Lower Crab Creek Arm and Eastern Dunes management areas, respectively. No season-of-use changes would be made. The 1,895-acre "Green Zone" would remain "open year-round" and the 1,459-acre "Yellow Zone" would be "seasonally open" from July 1 to October 1, on designated roads and trails only.
- Designate four "Red Zone" access routes between Sand Dunes Road and Moses
 Lake as "open" to motor vehicle travel and ORV riding (see Figure 2-7.1).
 Outside these four travel corridors, the "Red Zone" year-round ORV closure
 would continue and roadside fencing installed to prevent indiscriminate ORV
 entry along the east side of Sand Dunes Road.
- Continue the ORV closure within the Eastern Bluffs management area, but authorize a permanent 1.3-mile ORV access route linking the Eastern Dunes management area to the O'Sullivan Site.
- Revise ORV Area signs to clearly depict ORV Area boundaries and travel and riding restrictions.
- Inventory and evaluate the presence of cultural resources and sites within the Eastern Bluffs and Eastern Dunes management areas. If significant cultural resources are identified and determined eligible for the National Register, modify

the ORV Area boundary or implement area-specific closures to exclude ORV travel from these sensitive cultural properties.

• Designate and keep the 1.7-mile Powerline Road "open year-round" to motor vehicle travel/ORV use.

Grazing Management would be the same as Preferred Alternative.

<u>Visitor Information/Interpretation</u>: In addition to the "Watchable Wildlife" features outlined under Alternatives A and B, Alternative D includes the following element (see Figures 2-7.1, 2-7.2 and 2-7.3 for site locations):

- Potholes State Park/Winchester Wasteway Trail: Develop a pedestrian "Watchable Wildlife" hiking trail between Potholes State Park and the Winchester Wasteway. The 3.5-mile trail would traverse through shrub steppe, wetland and riparian habitats adjacent to the reservoir's western shoreline. The area provides high quality wildlife habitat in an essentially undisturbed and undeveloped context. The trail would require a foot bridge across the Frenchman Hills Wasteway.

Public Health and Safety/Environmental Protection:

Managed/Limited Motorized Access

- Maintain 47.3 miles of the primitive/gravel road network open year-round or seasonally to discourage random off-road vehicle travel.
- Restrict motorized water craft use to low-speed/minimum wake operation in the Upper West Arm HMA from March 15 through June 30 to enhance wildlife nesting and breeding success for grebes, waterfowl, and other shorebirds.
- Limit "Yellow Zone" motor vehicle travel and ORV riding to designated roads and trails only.
- Designate and "open" to motorized travel 2.7 miles of primitive road in the East Lind Coulee Arm (see Figure 2-7.2). Reopening and improving these roads by grading and/or gravel surfacing would enhance public access and recreation opportunities in an area where road access currently is limited.

• Retain the "Red Zone" year-round ORV closure except along designated ORV access routes between Sand Dunes Road and Moses Lake.

Resource Protection and Enhancement: Same as the Preferred Alternative except that there would be no seasonal restriction on non-motorized public access and floating device use in the south/central portion of North Potholes Reserve; and no additional firearm discharge restrictions would be adopted.